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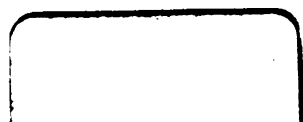


Columbia University  
in the City of New York

PRESIDENT'S  
ANNUAL REPORT

1901

Educ U 4030.430



MAY 2 1902

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MAY 2 1902



TWELFTH  
ANNUAL REPORT  
OF  
PRESIDENT LOW  
TO THE  
TRUSTEES

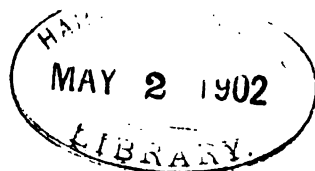
October 7, 1901

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Smith

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*To the Trustees of Columbia College in the City of  
New York:*

I have the honor to submit herewith my annual report for the academic year ending June 30, 1901.

Again I am obliged to record the death of an honored Trustee. On the 26th of April, 1901, Dr. William H. Draper (A.B., Columbia College, 1851; M.D., College of Physicians and Surgeons, 1855) died in the city of New York after a painful illness. Dr. Draper was elected a Trustee in 1889 and continued in active service until his death. His familiarity with everything relating to the Medical School gave especial value to his services, while his general interest in all that affected the University made him faithful and diligent as long as his health permitted. Both as an alumnus and as a Trustee he deserved well of his Alma Mater, and his name is now enshrined with those whose memory Columbia delights to honor. It is by such sons as he that a university justifies its right to be.

In accordance with my usual custom, I also record here, although, strictly speaking, the fact belongs in the record of the next academic year, the death, on August 3, 1901, at Williamstown, Mass., of the Right Rev. Abram Newkirk Littlejohn, D.D., LL.D., Bishop of Long Island, who was elected a Trustee of this University in 1879. Bishop Littlejohn's official duties as the head of a large diocese prevented him

from giving minute attention to the affairs of the University. On the other hand, he was always interested in its welfare and was punctual and regular in his attendance at meetings whenever his official duties permitted.

During the year under review, we have also lost by death two members of the educational staff. Dr. Frederick John Brockway (A.B., Yale, 1882, and M.D., College of Physicians and Surgeons, 1887) died at Brattleboro, Vt., April 21st, 1901. Since 1892, Dr. Brockway had been connected with the College of Physicians and Surgeons as an Assistant Demonstrator of Anatomy, and later as Secretary of the Faculty. Mr. Llewellyn Le Count (C.E., 1900), Assistant in Civil Engineering, died in Brooklyn, November 14th, 1900. Dr. Brockway, until he became ill, was a very efficient teacher. Mr. Le Count died within a few months of graduation; but, even in this short time, he had justified the confidence which led to his appointment.

The subdivision of the Bursar's office that went into effect at the beginning of the year has called for **Statutory** only one modification. The operations of **Changes** the Bureau of Purchases and Supplies have proved to be, as I was inclined to anticipate, on so small a scale as not to necessitate the support of a separate office for their oversight. Mr. Thomas Little, who has had charge of the Bureau during the year, has indeed effected some saving, item by item; but the bulk of purchases has not been great enough to permit the saving of the equivalent of his salary, or to afford the promise of such a result at any time that could be foreseen. Under these circumstances,

this Bureau, as a separate office, has been abolished, and its functions have been assigned to the office of the Registrar. This assignment keeps the Bureau, as heretofore, under the direction of the President ; and it also preserves what was the only vital feature of the original scheme. All warrants paid by the Bursar will still originate outside of his office ; only they will be drawn and signed, hereafter, by the Registrar as Chief of the Bureau of Purchases and Supplies, instead of by a separate and independent Chief. It was the idea of the accountants, in suggesting a separate Bureau for purchases and supplies, that probably all purchases made by any authority on behalf of the University could be effected through this office. It was not found desirable, however, nor, in many cases, practicable, to transfer to such an office the oversight of purchases made by the Superintendent of Buildings and Grounds or by the various Departments. These purchases, for the most part, are so special in character that it is doubtful whether any saving in money could be effected as to such matters by a purchasing bureau. It is certain, on the other hand, that the attempt to get, indirectly through a purchasing bureau, what these departments now obtain for themselves directly, would involve a great expenditure of time on the part of specialists in acquainting the bureau with their needs ; much effort in securing timely delivery by such an indirect process ; and probably needless duplication of accounts. It has been thought best, therefore, to leave the responsibility for such purchases where it now is. This decision limits the operations of the Bureau of Purchases and Supplies, practically, to the purchase of

stationery and articles of that character. It is quite evident that a competent clerk, under the direction of the Registrar, can effect such purchases substantially as well as they can be made through a separate bureau.

The establishment of the office of Registrar, on the other hand, with an adequate clerical force, has been of the greatest possible advantage to the University. Not only has it resulted in better records than we have ever had before ; but, because our records are in better shape, the work of the year has been carried on with a degree of smoothness and of freedom from error that are altogether gratifying. The report of the Registrar, which is hereto attached, presents a statement of the work done in every department of the University, with great fullness and yet very clearly. Dr. George B. Germann, the Registrar, has discharged the duties of his office with enthusiasm and intelligence, and the results of his labors are highly creditable to him. I have no doubt that, year by year, his reports will increase in value and significance. The scheme of accounting as between the Bursar and the Registrar has also worked well. In a word, this part of last year's reorganization has fully justified itself, and should be maintained and developed as circumstances require.

An amendment to the Statutes adopted during the year places the appointment of an Emeritus Professor upon the same basis as the grant of an honorary degree. That is to say, as the Statutes now read, a retiring Professor, in order to receive the title of Emeritus, must be recommended for the appointment by the Committee on Honors. This rec-

ommendation must be based, not only on length of service, but also on its distinguished character.

By another amendment of the Statutes passed this year, after July 1, 1902, a student who fails to register within the limit of time fixed by the regulations of the University will be allowed to register only by the payment of an additional fee of \$5. The University always has suffered, more or less, from the difficulty of securing prompt registration on the part of students. This is a trouble common to all similar institutions. After careful consideration of the various methods in use for dealing with this problem, the plan in force at the University of Chicago has been adopted. It is hoped that by giving careful notice of this change of statute, and by the strict enforcement of the new rule, the evil at which it is aimed will be reduced to a minimum.

Our new relations with Teachers College have resulted, during the year, in one important piece of legislation. The University will hereafter give the degree of Bachelor of Science to graduates of Teachers College who comply with the specified conditions. The course for which this degree is conferred is a professional course, parallel, for example, to the course in Chemistry which leads to the same degree. The first two years represent general culture, and the last two are professional in character. Teachers College, on its part, has raised its entrance requirements to the level both of our College and of our Schools of Applied Science.

It has been deemed wise not to interfere with the practice of Teachers College in conferring for its purely professional work a diploma rather than a



degree. The reasons for this determination are two-fold. In the first place, Teachers College diplomas have already acquired an honorable value throughout the country. It has not seemed worth while, therefore, to put at hazard this good reputation, by a change in the recognition granted for the successful completion of courses in Teachers College. Again, if a change were to be made, the only reasonable substitute for these diplomas would be degrees in pedagogy. In our thought it is better to encourage teachers to strive for the scholarly attainments that are recognized by the degrees of Bachelor of Arts, Master of Arts, and Doctor of Philosophy, and, in addition, for the Teachers College diploma as evidence of professional work well done, than it is to try to substitute for both of these a new degree that could acquire the desired significance only after many years.

The one incident of the year that involved a serious departure from old methods was the action of the President in appointing an officer to be known as the Comptroller of Sports. The financial problem of athletics at Columbia University is singularly difficult, for, in addition to the costly charges that have to be met elsewhere, the students of Columbia have been under great expense in order to control the use of a conveniently situated athletic field. It is scarcely too much to say that this added burden involved all of our athletic interests last year in financial chaos. The problem thus presented involved not only the cure of present ills, but the prevention of similar occurrences in the future. In this emergency, the President added to our existing and

Athletics

usual equipment of a Faculty Committee, an officer whom he designated as the Comptroller of Sports. The function of this officer is wholly financial. It is his duty to see that no branch of sport is permitted to incur financial obligations which it has not the means to meet ; and, to this end, he is authorized to demand the deposit in advance, in the interest of each branch of sport, of a sufficient sum in cash to justify indulgence in the sport affected. The real test of this system will come during the next academic year ; but it worked well for the remainder of this year after its inauguration in April.

As was pointed out last year, the women graduate students, who formerly registered as students of Barnard College, register now as students of the University. In my last report, I called **Women Graduate Students** attention to the fact that an officer known as the Adviser of Women Graduate Students had been appointed to be of such personal service to these students as circumstances might call for. The experience of the year has justified the appointment as a step in the right direction ; but it has been thought wise to substitute for this officer, with the co-operation of the Woman's Graduate Club, a paid Secretary of the Woman's Graduate Club. The problem is to bring the University into the most helpful touch with those whom it is desired to serve. On the educational side, the women need no different officers from the men ; and the various Deans are fully equipped to give them all the advice and information they require. On the personal side, also, few of them feel the need of special assistance, except in emergencies. But, on the other hand, it is

important that the University should be equipped to deal adequately with emergencies ; and it is believed that the usefulness of a competent and tactful lady to the women graduate students may often be of great value in many ways, especially to those who find themselves in a strange city and away from home. Something was undoubtedly accomplished along these lines during the year just closed ; but it is thought that the Secretary of the Woman's Graduate Club will be able to come into more natural relations with such students than any officer can. I am glad to be able to report the election by the Club, upon the nomination of the President of the University, of Mrs. Frank G. Bryson as its Secretary for the next academic year. Mrs. Bryson is a graduate of Barnard College in the Class of 1894, and she has since been a graduate student in the University. By experience, therefore, as well as by reason of her personality, she is believed to be well equipped for the duties she is about to undertake.

Our arrangement for the delivery of public lectures at the Metropolitan Museum of Art and the American Museum of Natural History has been modified during the year by mutual consent. Heretofore, the University has maintained for three months during the winter a series of public lectures at each Museum. These lectures have been popular in character, and have not differed essentially from those now maintained in New York by several other agencies. When our lectures were established, very few public lectures of any kind were available in the city. Now, however, it has seemed to be good judgment to change the character of the University lec-

tures so that the University may render a more distinctive service to the community. After this year, only one such course of lectures will be given each winter ; at one Museum in one year, and the next at the other. The lectures at the Metropolitan Museum will relate to art, and those at the Museum of Natural History, to science. The University will endeavor to secure for this annual course of lectures a man truly eminent in his own domain, hoping thus to give to the city each year the opportunity to hear some really distinguished authority in either science or art and under conditions likely to ensure a satisfactory result. A corresponding change will be made, also, in the lectures to be delivered at the Cooper Union.

In my report of last year, I had the pleasure of announcing an anonymous gift of a building to be the headquarters of the religious and spiritual life of the students. This year I am Earl Hall permitted to say that the generous giver was Mr. William E. Dodge of New York. By his consent, also, the building has been given the name of Earl Hall in memory of his son of that name. The building has been placed under the charge of an Advisory Committee consisting of Dr. James H. Canfield, Chairman ; Prof. William M. Sloane, and Messrs. Cleveland H. Dodge, William H. Sage, William Fellowes Morgan, William G. Low, Jr., V. Everit Macy, and Miss Laura D. Gill. This Committee, with the approval of the President of the University, has appointed Mr. Josiah C. McCracken, who was graduated in June, 1901, from the Medical School of the University of Pennsylvania, the Secretary of Earl Hall. It was hoped that the building would be ready for

occupancy by October; but so many delays have been encountered in its construction that it is not likely to be ready for use before the beginning of December.

Reference was made in my last report to the Statue of Alma Mater to be presented to the University as a memorial of the late Robert Goelet, of the Class of '60, by his widow and children. I am happy to be able to say that the model for this statue, prepared by Daniel C. French, has been approved by both the Donors and the Trustees, and that the statue is expected to be ready for presentation to the University at the Commencement of 1902. All who have seen the model have been greatly pleased with it.

The University has offered, as also has Teachers College, to grant free tuition to as many as five Filipinos who may be recommended by the general Government. Thus far no applications have been received under this offer. That it was made, however, is significant of the willingness and purpose of the University to coöperate with the Government in every possible way in making our relations to the Philippine Islands helpful.

The entrance examinations for admission to the College, to Barnard College, to Teachers College, and to the Schools of Applied Science, were held in June by the College Entrance Examination Board, in regard to the formation of which full information was given in my last report. I am not able, at this writing, to speak of the result of this experiment, except in general terms. My impression is that it has worked suffi-

ciently well to be continued; and that, when its methods are perfected, it will mark a great advance in the relations between the colleges and the secondary schools of the country.

The summer session of 1900 was so successful that a summer session has been made a permanent feature of the work of the University by the concurrent action of the University corporation and of the corporation of Teachers College. Summer Session

The Committee on Employment reports that, through its agency, 55 students have been enabled to earn, among them, \$4977: from teaching and tutoring, \$3599; from typewriting, Committee on Employment \$196.75; from clerical work, \$323; and from miscellaneous work, \$433.25. This shows a gratifying increase, as compared with former years; the amount so earned last year having been somewhat less than \$3000, and the year before \$1600. A systematic effort to make the work of this Committee better known to employers ought to result in a great increase of its usefulness.

The University has made a suitable exhibit at the Pan-American Exposition at Buffalo. Much of the material prepared for this exhibit will be of Miscellaneous permanent value. The University has also accepted during the year an invitation to be represented on the following interesting occasions: at the 450th anniversary of the founding of the University of Glasgow; at the King Alfred Millenary celebration; at the Bi-Centennial of Yale. At the University of Glasgow, Columbia was represented by Prof. Jackson. At the King Alfred Millenary, it was to

have been represented by Prof. Perry ; but the date of this celebration has been twice deferred, and it is doubtful whether any representative of Columbia can actually be present. At the Yale Bi-Centennial, the University is to be represented by the President ; by Prof. Van Amringe, Dean of Columbia College ; by Prof. Kirchwey, Acting Dean of the School of Law ; by Dr. McLane, Dean of the College of Physicians and Surgeons ; by Miss Gill, Dean of Barnard College ; and by Prof. Russell, Dean of Teachers College.

An interesting incident of the year was the visit to the University of Baron von Holleben, the Imperial German Ambassador to the United States. Baron von Holleben came as the guest of the Deutscher Verein, a club connected with the Germanic Department, to which he kindly made an interesting address. He has since permitted himself to be elected an honorary member of this organization. He expressed himself as much gratified by the evidence he saw of the interest in Germanic studies at the University.

The Baccalaureate sermon of the year was preached by the Rev. Dr. William S. Rainsford, of St. George's Church.

Our new relationship with Barnard College and with Teachers College has worked to the mutual satisfaction of all concerned ; and at the recent Commencement the graduates of Barnard College were presented for the degree, for the first time, by their own Dean ; and the graduates of Teachers College, also for the first time, received their diplomas at the Commencement of the University.

The Commencement was notable in three other

ways. Much the largest number of degrees were conferred at it that have been conferred at Commencement any Commencement in the history of the University. As many as 661 students received University recognition at this time. On this occasion, also, for the first time, all of the degrees were conferred in English. There are doubtless those who regret the disappearance of Latin from this function ; but I think it cannot be doubted that the audience was much more interested than usual, because it was able to follow all of the proceedings. Again, and once more for the first time, through the completion in temporary form of the memorial dining-room in University Hall, it was possible to gather the alumni together in large numbers after the Commencement. Between four and five hundred of the alumni were thus gathered under the hospitable roof of Alma Mater, and listened to interesting addresses from some who had received honorary degrees and from others. . I think it is the general opinion that no such successful Commencement, taking everything into consideration, has been held by the University within the memory of any who were there.

The honorary degrees conferred at the last Commencement were as follows :

Upon Rufus W. Peckham, Associate Justice of the Supreme Court of the United States, the degree of Doctor of Laws.

Upon William H. Maxwell, Superintendent of Public Instruction of the City of New York, the degree of Doctor of Laws.

Upon Arnold Hague, of the United States Geological Survey, the degree of Doctor of Science.



Upon Theodore L. De Vinne, the head of the De Vinne Press of New York City, the degree of Master of Arts.

Upon George M. Lefferts, M.D., Clinical Professor of Laryngology and Rhinology in the College of Physicians and Surgeons, the degree of Master of Science.

Upon the Rev. Frank D. Gamewell, one of the defenders of Pekin during the siege of the foreigners in 1900, the degree of Master of Science.

The honorary degree of Doctor of Science was conferred for the first time in the history of Columbia University.

For a statement of degrees conferred in course, reference is asked to the report of the Registrar. It is significant that more degrees of Master of Arts were conferred than of Bachelor of Arts upon graduates of Columbia College.

During the year, the thirteenth edition of the **General Catalogue** covering the years from 1754 to 1900, has been issued. The summary is interesting.

|   |        |        |
|---|--------|--------|
| Graduates in Arts (Columbia College).....       | 3,495  |        |
| Graduates in Arts (Barnard College).....        | 145    |        |
| Graduates in Medicine.....                      | 4,538  |        |
| Graduates in Law.....                           | 4,282  |        |
| Graduates in Applied Science.....               | 1,289  |        |
| Graduates in Political Science.....             | 186    |        |
| University Graduates (A.M., LL.M., and Ph.D)..< | 744    |        |
| Honorary Graduates.....                         | 584    |        |
|   | <hr/>  |        |
| Total.....                                      | 15,263 |        |
| Deduct for repetitions.....                     | 1,007  |        |
|   | <hr/>  | 14,256 |

## KNOWN TO BE DECEASED

|   |       |        |
|---|-------|--------|
| Graduates in Arts (Columbia College).....       | 1,731 |        |
| Graduates in Arts (Barnard College).....        | 1     |        |
| Graduates in Medicine.....                      | 585   |        |
| Graduates in Law.....                           | 461   |        |
| Graduates in Applied Science.....               | 82    |        |
| Graduates in Political Science.....             | 14    |        |
| University Graduates (A.M., LL.M., and Ph.D.).. | 12    |        |
| Honorary Graduates.....                         | 433   |        |
|   | <hr/> |        |
| Total.....                                      | 3,319 |        |
| Deduct for repetitions.....                     | 170   |        |
|   | <hr/> | 3,149  |
| Presumed to be living.....                      |       | 11,107 |

The report of the Registrar hereto attached gives the statistics of the University in a form so much more full and complete, as to the points University which the report covers, than those which Statistics have usually appeared in the body of my report, that it is enough, in a general way, to ask reference to the Registrar's report. This report, however, may properly summarize some of the facts that are given more in detail by the Registrar.

## SUMMARY OF OFFICERS

|                                 | 1899-1900 | 1900-1901 |
|---------------------------------|-----------|-----------|
| Officers of Instruction.....    | 350       | 379       |
| Officers of Administration..... | 12        | 18        |
| Emeritus Officers.....          | 13        | 10        |
|                                 | <hr/>     | <hr/>     |
|                                 | 375       | 407       |

## SUMMARY OF STUDENTS

|                             | 1899-1900 | 1900-1901 |
|-----------------------------|-----------|-----------|
| University Corporation..... | 2452      | 2695      |
| Barnard College.....        | 333       | 301       |
| Teachers College.....       | 391       | 528       |
|                             | <hr/>     | <hr/>     |
|                             | 3176      | 3524      |

|  | 1899-1900  | 1900-1901  |
|--|------------|------------|
| Teachers College Extension Students.....                                   | 751        | 679        |
| Auditors.....  | 31         | 33         |
| Summer Session.....  |            | 417        |
|  | <hr/> 3958 | <hr/> 4653 |
| Deduct for duplicates (see explanation by<br>Registrar for 1900-1901)..... | 42         | 213        |
|  | <hr/>      | <hr/>      |
| Total.....   | 3916       | 4440       |

An examination of these figures as they relate to the three corporations affected is interesting.

The University corporation has gained students, as follows :

|   |       |
|---|-------|
| College.....                                | 11    |
| Law School.....                             | 43    |
| College of Physicians and Surgeons.....     | 10    |
| Applied Science.....                        | 75    |
| The Non-Professional Graduate Faculties.... | 104   |
|   | <hr/> |
| Total.....                                  | 243   |

The percentage of students with degrees, in the various Schools other than the College, is as follows :

|   | 1899-1900 | 1900-1901 |
|---|-----------|-----------|
| School of Law.....                      | 62        | 62        |
| College of Physicians and Surgeons..... | 42        | 39        |
| Applied Science.....                    | 16        | 16        |
| Political Science } .....               | 88        | 99        |
| Philosophy } .....                      | —         | —         |
| Pure Science } .....                    | —         | —         |
|   | <hr/>     | <hr/>     |
| Average.....                            | 46½       | 49        |

The membership of the student body may be further classified as follows :

|   | 1899-1900  |            | 1900-1901  |            |
|---|------------|------------|------------|------------|
|   | Students   | Percentage | Students   | Percentage |
| College undergraduates..  | 465        | 18.64      | 476        | 17.50      |
| Students holding a first degree, not studying in the College..... | 918        | 37.77      | 1087       | 40.3       |
| Students without a degree, not studying in the College.....       | 1069       | 43.59      | 1132       | 42.2       |
|   | <hr/> 2452 | <hr/> 100. | <hr/> 2695 | <hr/> 100. |

In 1899-1900, there were in the College 8 students who had taken their first degree and who were candidates for the Columbia degree of Bachelor of Arts. In 1900-1901, there were 2 such students.

The principal gain has been of students who have already taken their first degree. It appears that, outside of the College, 40.3 % of the entire student body had the advantage of a preliminary education that is represented by some degree. It is pleasant to observe that the proportion of students who are neither candidates for the degree of Bachelor of Arts, nor graduates of other institutions, continues to decrease. The percentage of such students fell last year from 43.59 to 42.2. Apart from the College, in which there is a gain of 11, the total gain is represented by 169 students who have taken their first degree, and by 63 students who have not.

The figures given by the Registrar, in Table 4, which show the geographical distribution of students since 1890, are especially interesting. It happens that the year 1892, the first year of the decade just closed, was the year of smallest registration since my election to the presidency. It is interesting, therefore, to compare the geographical distribution of students at the beginning and the end of this decade. The Registrar has rightly followed in this table the divisions of the country used in the United States Census.

|  | 1891-1892  | 1900-1901  |
|--|------------|------------|
| North Atlantic Division.....               | 1400       | 2273       |
| South Atlantic Division.....               | 32         | 66         |
| South Central Division.....                | 21         | 75         |
| North Central Division.....                | 65         | 160        |
| Western Division.....                      | 24         | 76         |
| Alaska, Hawaiian Islands, and Porto Rico.. | —          | 4          |
| Foreign.....                               | 31         | 41         |
|  | <hr/> 1573 | <hr/> 2695 |

The increase of attendance from the North Atlantic Division is at the rate of about 50 %; the gain in attendance from other sections of the country varies from 200 % to 300 %. It is also interesting to point out that the gain from 1892 to 1897 inclusive, the last six years at the old site, was 348 ; while the gain from 1898 to 1901, the four years spent at the new site, was 774. In other words, our annual gain at the old site during the last six years averaged 58 per annum ; at the new site, it has averaged 193 per annum. It is fair to say, in this connection, that the last six years at 49th Street were years of constant reorganization. The Law School was placed upon a new footing ; the course in the Medical School was changed from three years to four years ; and the standards in all the other Schools were equally advanced. On the other hand, it is gratifying to perceive that, notwithstanding the improvement in the quality of students which has thus been demanded,—perhaps, one may even say, because of it,—the numbers in attendance upon the University have tended steadily to increase. It is apparent, however, that the removal to the new site has made possible a rate of increase that otherwise would have been quite out of the question.

Barnard College, since last year, has become altogether an undergraduate college. The figures in the table under discussion relating to Barnard College are given free from duplication. In addition to the 301 students referred to in the table, Barnard College gave instruction to

|  |    |
|--|----|
| Teachers College students.....   | 54 |
| University students, taking undergraduate<br>studies at Barnard College..... | 29 |

making a total of 384. This is an increase of 51 over last year, although a year ago Barnard College was credited with 82 graduate students. Those who formerly registered as graduate students of Barnard College now register directly as students of the University. Full details in regard to Barnard College are given in the report of its Dean, hereto attached.

For full particulars as to the attendance upon Teachers College, reference is also asked to the report of its Dean. In the meanwhile, it is interesting to point out that Teachers College has grown from 391 a year ago to 528 this year. It numbers among its students 180 college graduates, as against 100 college graduates a year ago; and 148 normal-school graduates, against 97 normal-school graduates a year ago. The percentage of college graduates has increased to 34, from 25 $\frac{1}{2}$  a year ago. It is thus clear that the union of Teachers College with the University has been followed not only by a great growth in numbers, but also by an improvement, equally marked, in the quality of its students. This is as it should be, and both Teachers College and the University are to be congratulated upon this result. There are in the Teachers College a body of special students, auditors, and irregular students, of which no record is made in the foregoing table. These may be summarized as follows :

|   | 1899-1900 | 1900-1901 |
|---|-----------|-----------|
| Special students.....                     | —         | 37        |
| Auditors and irregular students.....      | 63        | 65        |
| Special students in Hospital Economics... | —         | 7         |
|   | 63        | 109       |

There are also connected with the College many extension students—last year 750; this year 679. The

work done by such students is serious, as far as it goes, and can under appropriate conditions be counted towards a diploma or a degree.

The Summer Session is maintained jointly by the University corporation and by Teachers College. For full details of the Summer Session of 1901, reference is asked to the report of the Director. It is enough to say here, that the total attendance, this year, has been 579, as against 417 in 1900; a gain of 162 for the year. The work done in the Summer Session is also serious in character, and can be counted in partial fulfilment of the requirements for either a Teachers College diploma or a University degree.

The rapid growth of the Summer Session, and the evident earnestness of those who come to it, fully justify the statement of the Director, Professor Butler, that it is evident the University has something to give in this way for which there is a large and urgent demand.

I commend the report of the Librarian to the careful attention of the Trustees. It is an admirable statement of the various activities of the Library, and bears upon the face of it the marks of the efficiency that characterizes the Library in all its relations. The Librarian's report is so full that but little comment is called for at my hands.

The following table shows the number of volumes added to the Library since our removal to the new site :

|                 |        |
|-----------------|--------|
| 1897-98.....    | 16,377 |
| 1898-99 .....   | 25,404 |
| 1899-1900 ..... | 20,200 |
| 1900-1901 ..... | 17,559 |

The total number of volumes in the Library on the 30th of June was, in round numbers, 311,000.

The use of the Library since our removal to the new site, as indicated by the loans of books to be used at home, is as follows :

|                 |        |
|-----------------|--------|
| 1897-98 .....   | 47,832 |
| 1898-99 .....   | 77,261 |
| 1899-1900 ..... | 82,688 |
| 1900-1901 ..... | 87,848 |

The small use in 1897-98 reflects the fact that the Library was closed in that year from July to September inclusive, during the process of removal.

The Librarian's report, for the first time, gives interesting information in regard to those who have borrowed books from the Library within the year under review. The readers may be classified as follows :

|                                 |      |      |
|---------------------------------|------|------|
| Officers of the University..... | 404  |      |
| Graduates :                     |      |      |
| Columbia.....                   | 603  |      |
| Barnard .....                   | 69   |      |
| Teachers College.....           | 22   |      |
|                                 | —    | 694  |
| Students :                      |      |      |
| Columbia.....                   | 1515 |      |
| Barnard.....                    | 288  |      |
| Teachers College.....           | 220  |      |
|                                 | —    | 2023 |
| Auditors.....                   | 12   |      |
|                                 | —    | 3133 |

It is impossible to make an exhaustive statement of the number of books used within the building, for it is the policy of the Library to permit the freest possible access to the shelves. The Librarian shows,



however, that in 1899 the loans made at the Loan Desk for use within the building, week by week, for the first three months of the year, ran from 565 to 863 per week. In 1900, during the same period, the loans ran from 899 to 1377 per week, and in only three weeks did the number of loans fall below 1000. In 1901, during the same three months, the loans ran from 1120 to 1731 per week, and in no week did the loans fall below 1100. There is no reason to doubt that this showing is entirely typical, and that the use of the Library is constantly growing. Its value as a collection of books is also steadily increasing, and it is to-day a scholar's library of first-rate importance. The University should spare no effort as opportunity affords to develop it where it is still weak and to strengthen it where it is already strong.

As bearing upon the policy of giving readers free access to the shelves, it is interesting to state that the aggregate loss of the entire Library, since it was reorganized in 1882, is but a trifle more than one-third of one per cent. of its entire contents. The aggregate loss in the Avery Library, since its foundation, is about thirty volumes, or about one-fifth of one per cent. of its contents. It may confidently be said, therefore, that the open-shelf policy has fully justified itself in our experience.

The Avery Library continues to grow, not only by the use of the income of its endowment, but through the continued generosity of Mr. Avery. This library contains very nearly 17,000 volumes. The librarian in charge says, in his annual report, that "to transfer art literature into art is the object of our endeavor. There is gradually crystallizing about the Avery

Library a school of design which may easily attain to a very large degree of usefulness and importance." Much of this result is due to the intelligent and enthusiastic interest which Mr. Edward R. Smith, the librarian in charge, brings to his work.

The Library has been favored again by generous gifts for the purchase of books. An unnamed friend presented \$10,000 for this purpose, adding the generous permission to use as much of this sum as might be desirable for binding. The President of the University also gave \$5000 for the purchase of books. Mr. William G. Low gave the sum of \$250, of which \$50 was to be used for the American School at Jerusalem, and the remainder for the purchase of books on maritime law. Subsequently Mr. Low consented to a use of a part of this fund for books in the domain of international law. Mr. James Loeb has continued his annual subscription of \$75 for labor periodicals.

During the year, Mr. W. C. Schermerhorn has made himself responsible, in the sum of about \$2000, for the completion of a valuable collection of British Parliamentary Papers, which he presented to the Library several years ago.

Mr. John. D. Crimmins has very kindly completed the set of Mansi's *Amplissima Collectio*, the earliest volumes of which we already owed to his generosity.

The Holland Society, also, has lodged with the University, upon deposit, its valuable and unique Grotius Library, as well as other books of interest and importance. It is gratifying to record this fresh evidence of the friendly interest of the Holland Society of New York in the University.

The total expenses of the Library during the year,

including the Law Library, were \$58,269.75. Of this sum, salaries absorbed \$30,605.97. The remainder was available for books and binding. No part of the work of the Library during the year has been more significant than the great progress which has been made in placing the books of the Library in thoroughly good repair. Through the energy and capacity of Dr. V. G. Simkhovitch, who, as Supervisor of the Serial Department, has had charge of the binding, important improvements have been made in the manner of binding, which have also resulted in great economy.

The report of the Director of the Gymnasium is interesting. It fully justifies the Trustees in all that they have done to strengthen and develop this branch of our work. The Director reports most gratifying results as to the development of the Classes of 1902 and 1903, both in the College and in the Schools of Applied Science. These classes are reported upon, because these are the first to take the two years of required work in the Gymnasium which is now demanded by the curriculum both of the College and of these Schools. The Director points out, that, whereas the natural increase in strength for one year, in youths of that age, would be represented by an average of 80 points, the actual increase in all of these classes is approximately three times the normal. Of the students of the incoming classes, 59 have been taught to swim.

By an arrangement entered into with Barnard College and Teachers College, the Gymnasium was thrown open to women on two evenings of the week, during the last few months of the year. This oppor-

tunity was highly appreciated. In this period 28 women were taught to swim.

The Director reports that the use of the Gymnasium during the academic year just closed is indicated by 58,312 units. The number of baths taken in the pool was 22,825, being an increase of 3400 over the year before.

The entertainment given by the Gymnastic Team to the Naval Cadets of the French Training-ship, *Duguay-Trouin*, entitles it to the thanks of the University. The Team acquitted itself with credit on many other occasions.

The College has had, this year, 476 students, the largest number in its history. The prospects are that it will continue to increase. For statistical details, reference is asked to the reports of the Dean and the Registrar. In particular, the usual statistics relating to the entrance examinations, which have heretofore been embodied in my own report, will hereafter be found in the report of the Dean. It is sufficient here to call attention to some of the salient features of these reports.

One of the most notable of these is the increasing number of students coming to the College from a distance. The following table gives the facts bearing upon this point for each year since our removal to the new site :

|                | Number of<br>States<br>Represented | Foreign<br>Countries | Students from<br>Outside the City<br>of New York |
|----------------|------------------------------------|----------------------|--|
| 1897-98.....   | 16                                 | 1                    | 111  |
| 1898-99.....   | 20                                 | 1                    | 128  |
| 1899-1900..... | 24                                 | 3                    | 144  |
| 1900-1901..... | 24                                 | 1                    | 162  |

Of these, there came this year from the North Atlantic Division, 127; from the South Atlantic Division, 8; from the South Central Division, 9; from the North Central Division, 14; from the Western Division, 3; from England, 1.

These figures show in a striking way that the old Columbia College, which for many years was entirely local, is now becoming as truly national in character as any in the country. Other figures that tell the same story, and that also bear gratifying witness to the present standing of the College as a school of liberal culture, are the following. These show the number of students admitted to the College since our removal to the site by transfer from other colleges :

|                | Freshman<br>Class | Sophomore<br>Class | Junior<br>Class | Senior<br>Class | Total |
|----------------|-------------------|--------------------|-----------------|-----------------|-------|
| 1897-98.....   | 7                 | 5                  | 3               | 4               | 19    |
| 1898-99.....   | 5                 | 7                  | 8               | 1               | 21    |
| 1899-1900..... | 3                 | 6                  | 13              | 9               | 31    |
| 1900-1901..... | 8                 | 14                 | 14              | 11              | 47    |

The significance of these figures is well brought out by the contrast which it occurred to me to make in my last Commencement address. In 1870, the year in which I was graduated, the College numbered in all, 129 students. Of these, 114 came from the State of New York, and 15 from the State of New Jersey. In other words, the College then was entirely local. The figures just given show that in the interval it has changed as much in character as in size. If I were to try to account for this change in character, I should explain it as due especially to three things: (1) to the increasing reputation and prestige of the University; (2) to its own enlarged and more

flexible curriculum; and (3) to our removal to the present site.

The educational standing of Columbia University as a seat of learning is undoubtedly much higher at the present time, both absolutely and comparatively, than it was in 1870. At that date, indeed, no Columbia University existed, even in name. Such Schools as were then maintained by the Trustees were separately administered, and contributed nothing at all to each other's reputation. At the present day, the general life and the general prestige are felt as a strong impulse in every School of the University. The growth in material resources, also, during the last thirty years, has enabled the University greatly to broaden its educational offer; while its location in the city of New York has enabled it to draw to itself many of the strongest men in the country, in every department of instruction and research. These influences have given to the University a standing and a reputation throughout the country that are abundantly attested by the large number of graduate students that are coming to its doors. This circumstance, in turn, in connection with the large success which our graduates of recent years have had in obtaining important appointments, gives to the Columbia degree a value that attaches to it not in one School only, but in all. This it is, I take it, which creates the disposition, in distant parts of the country, to come to Columbia College for a liberal education, as well as to Columbia University for the training of a specialist.

When the circular of the College is sent for, it reveals to the intending student a wealth of privilege that is equalled in only a few places and surpassed

nowhere. The curriculum has not only been improved, in the last ten years, in the sense that it has been enlarged ; but it has been hardly less improved by being made more flexible. And yet this has been accomplished without departing from the old ideals too radically. Some knowledge of at least one classical language is still required for the degree of Bachelor of Arts, and the curriculum demands almost as much required work as it did ten years ago. But great flexibility is given to the curriculum by permitting the student to take his required work pretty much at his pleasure, instead of compelling him to concentrate it within the first two years of his course. For example, students who do not study French must study German ; and *vice versa*. The figures of the last four years show that of those beginning the study of French in the College, 159 have begun it as Freshmen, 23 as Sophomores, 12 as Juniors, and 6 as Seniors ; of those beginning the study of German, 175 have begun it as Freshmen, 20 as Sophomores, 13 as Juniors, and 10 as Seniors. Again, the curriculum demands a certain knowledge of at least one scientific subject studied in the laboratory. This requirement may be met by work done in the fitting schools, or in any year of the College course. The table to be found in the Dean's report shows that, during the last four years, of those who have thus studied Chemistry in the College, 80 have begun it as Freshmen, 64 as Sophomores, 98 as Juniors, and 32 as Seniors. Of those who have studied Physics, 117 have begun the subject as Freshmen, 71 as Sophomores, 43 as Juniors, and 20 as Seniors. Of those who have thus studied Botany, 1 has

begun the subject as a Freshman, 16 as Sophomores, 19 as Juniors, and 10 as Seniors. Of those who have thus begun Zoölogy, none have taken it as Freshmen, because the study of Zoölogy presupposes some knowledge of both Physics and Chemistry ; 6 have begun it as Sophomores, 42 as Juniors, and 26 as Seniors. It is thus evident that this privilege of taking much of the required work when it may be convenient, gives great flexibility to the course. Where work is largely individual, as it is in a laboratory, no embarrassment comes from the mingling of classes. In the subjects that are taught exclusively in classes, and in which evenness of maturity in the students attending is a matter of importance, the regulations indicate the range of years within which a choice is permissible ; and they give to the Dean, and not to the student, the right to determine whether the specified year may be departed from. This system seems to the Faculty better than an absolutely free election ; because it ensures for every student such a liberal education as may be developed around a specified core of prescribed studies. On the other hand, it permits to a great degree the privilege of concentrating one's studies in a given department from the very beginning. It seems to the Faculty better, also, than the group system, because it is more flexible. No set of groups can be devised that will satisfy everybody. Under the group system, therefore, the student is continually petitioning for a modification of the group, which, after all has been said, is an artificial rather than an inevitable selection. Such petitions, therefore, are frequently granted, until the administration of the groups



becomes difficult in the extreme. The curriculum in vogue at Columbia, on the other hand, is practically the group system on a self-regulating basis. It encourages the study of subjects that are naturally related to each other ; and it secures a sufficiently broad outlook to satisfy the demands of a good liberal training. Within the limits as thus defined, however, each student makes his group for himself ; and the system, therefore, works smoothly and without embarrassment to anybody. So far as I can learn, there is no disposition to alter it among either officers or students.

Our removal to the new site has been a factor in the growth of the College, and in the broadening of its influence, not only because it has permitted educational opportunities to be offered which formerly we could not give, but also because the greater extent of the new site, the gymnasium privileges, and the opportunities of lunching together, have all co-operated to develop among the students an *esprit de corps* which is strengthening every day. The strong desire of the College students for dormitories, as a means of still further strengthening this feeling, seems to me a natural one ; and, in view of the large number of students that are already coming to the College from out of the city, not to speak of the still larger number who live within the city at great distances from the College, I hope that this demand will soon be gratified. I shall have something more to say upon the same subject at another point in this report ; but I emphasize here the advantage, not to say the need, of dormitories, from the point of view of the College alone ; because I do not think it is generally known

how greatly the character of Columbia College has changed, in the last three decades, by becoming national in scope rather than entirely local. It may be true that for many young men, whose home is in the city, it is an advantage to go elsewhere to college; but he would be a bold man who should argue, that it is not equally true that it is an advantage for many men, whose home is in the country, to get their liberal education in the inspiring and stimulating atmosphere of a great city. At any rate, such men are coming to Columbia College in large numbers; and the same influences that have led the forerunners to come are likely to persist. Under these circumstances, it seems clear that the University should make some provision for students of this character. Neither at Harvard nor at Yale does the entire student body live upon the campus; and it is certain that even the entire College cannot be so accommodated at Columbia. On the other hand, it is abundantly demonstrated, both at Cambridge and at New Haven, that dormitories upon the outside, in connection with dormitories upon the campus, are entirely consistent with the development of a strong college life.

I am obliged to report that the average age of the Freshman Class, at entrance, has apparently slightly increased since our removal to the new site. At the beginning of the decade, in 1891-92, this age was 17.8. It was precisely the same in 1896-97, the last year at the old site. For the years since then, the figures are as follows:

|                |      |
|----------------|------|
| 1897-98.....   | 18.4 |
| 1898-99.....   | 18.1 |
| 1899-1900..... | 18.3 |
| 1900-1901..... | 18.2 |

The average age as thus stated, however, is somewhat misleading; for, under our new curriculum, with its greater flexibility, permitting many students to take a college course who before were unable to comply with its conditions, we are constantly receiving a number of men much older than those who formerly came to college. In 1897-98, for example, the oldest Freshman was 46 years of age. In 1900-1901, the oldest Freshman was 22. The following figures, on the other hand, seem to me to present the matter significantly; and, while there is some variation, the tendency to an increase of age, if it exists at all, is not marked.

|           | Percentage entering<br>under 17 years<br>of age | Percentage entering be-<br>tween 17 and 18<br>years of age | Percentage entering<br>over 18 years<br>of age |
|-----------|---|--|--|
| 1897-98.. | 12.9  | 31.5   | 55.6   |
| 1898-99.. | 22.8  | 19.1   | 58.1   |
| 1899-1900 | 18.5  | 30.3   | 51.2   |
| 1900-1901 | 12.5  | 30.5   | 57.  |

In former reports, I have given tables that show the number of students presenting themselves for examination in various subjects. This table is now to be found in the report of the Dean. While the requirements for entrance have not been radically changed during the last four years, they have been changed in detail sufficiently to make a comparison possible only between the last two years. This comparison, however, is interesting; because in June, 1900, the examinations were held by our own University Committee on Entrance Examinations; and in June, 1901, they were held by the College Entrance Examination Board, the formation of which I reported in my last annual report. The comparison shows

that a larger percentage of students passed this year in Mathematics, in History, and in German ; and a smaller percentage, in English, Latin, and Greek. The figures relating to French are substantially identical for both years. It is noticeable that a larger percentage of students who took the examinations to enter the College were successful, in every subject, than of the students who took the same examinations for entrance to the Schools of Applied Science. This is partly due to the fact that, until within a year, the standards of the two schools were not identical. I expect to see this difference in proportion disappear, year by year, now that the students of the College and of the Schools of Applied Science are called upon to meet identically the same tests.

A year ago, for the first time, students were permitted to enter the College without Latin as well as without Greek. As a matter of fact, 6 students did enter the Freshman Class in that way last October. It is interesting to observe that the class beginning Latin, which was organized last October for the first time, numbered not 6 students but 14. Of these, 3 were students who had entered on advanced standing, without Latin, by transfer from other colleges ; and 5 of them were special students, of whom 3, at least, are availing of this opportunity to equip themselves for a degree. Thus this permission to enter without Latin, upon condition of taking the subject within the College, is seen to be a distinct encouragement to the study of this language. In June, 1901, the number who applied for admission without either Latin or Greek was 21.

The following tables will be found interesting.

The first shows the number of courses, by Departments, open to students of the College, thus indicating the range of their opportunities. The second shows the number of students, in all four classes, studying in each of the various Departments. No distinction is made between studies that are required and those that are elective.

NUMBER OF COURSES, BY DEPARTMENTS, OPEN TO COLLEGE STUDENTS

|                           |    |                             |      |
|---------------------------|----|-----------------------------|------|
| Anatomy .....             | 4  | Mining.....                 | 2    |
| Architecture .....        | 17 | Municipal or Private Law.   | 8    |
| Astronomy .....           | 5  | Music .....                 | 11   |
| Botany .....              | 8  | Normal Histology.....       | 1    |
| Chemistry .....           | 16 |                             |      |
| Civil Engineering.....    | 4  | Philosophy and Psychology : |      |
| Comparative Literature..  | 5  | Philosophy .....            | 8    |
| Economics and Social      |    | Psychology .....            | 9    |
| Science .....             | 9  | Anthropology .....          | 3    |
| Electrical Engineering... | 1  | Education .....             | 25   |
| English.....              | 21 |                             | — 45 |
| Geography .....           | 5  | Physics .....               | 12   |
| Geology.....              | 4  |                             |      |
| Germanic Languages and    |    |                             |      |
| Literatures .....         | 27 | Romance Languages and Lit-  |      |
| Greek .....               | 20 | eratures :                  |      |
| History.....              | 14 | French.....                 | 17   |
| Indo-Iranian Languages..  | 5  | Italian .....               | 4    |
| Latin .....               | 15 | Spanish.....                | 4    |
| Mathematics.....          | 9  | Romance Philology.          | 1    |
| Mechanical Engineering..  | 9  |                             | — 26 |
| Mechanics.....            | 6  | Semitic Languages.....      | 11   |
| Mineralogy .....          | 7  | Zoölogy .....               | 6    |

NUMBER OF COLLEGE STUDENTS STUDYING IN EACH DE-  
PARTMENT

*Literatures*

|                          |     |                           |    |
|--------------------------|-----|---------------------------|----|
| English.....             | 375 | Mechanical Engineering..  | 18 |
| German .....             | 212 | Astronomy .....           | 14 |
| Latin .....              | 203 | Botany.....               | 12 |
| French.....              | 179 | Civil Engineering.....    | 8  |
| Comparative Literature.. | 157 | Anatomy .....             | 6  |
| Greek.....               | 84  | Pathology .....           | 6  |
| Spanish .....            | 23  | Physiology .....          | 6  |
| Italian .....            | 6   | Electrical Engineering... | 4  |
| Indo-Iranian.....        | 4   | Mechanics.....            | 4  |
| Semitics.....            | 4   | Mineralogy .....          | 3  |

*Sciences*

|                  |     |
|------------------|-----|
| Mathematics..... | 145 |
| Chemistry .....  | 93  |
| Physics.....     | 93  |
| Geology .....    | 19  |
| Zoölogy .....    | 19  |

*Miscellaneous*

|                  |     |
|------------------|-----|
| History.....     | 267 |
| Economics .....  | 162 |
| Philosophy.....  | 47  |
| Psychology ..... | 141 |
| Education.....   | 26  |
| Music.....       | 25  |

In view of the Registrar's report, which covers all questions of statistics as to these Schools much more fully than I have been in the habit of doing, I shall omit from this report the figures I have usually given in this connection. For all statistical information, therefore, in regard to any of these Schools, reference is asked again to the reports of the Registrar and of the respective Deans.

In the presentation of my report this year, I am proposing to omit the Departmental Reports that have sometimes been attached to it. Whatever is of especial significance in these documents, and worthy

of wide distribution, is summarized in the Reports of the various Deans or of the Registrar. For the rest, they are better suited for the information of the President than for the instruction of the public. I value highly the record of publications from each Department, for this gives a good indication of the literary and scientific activity of the various officers of the University ; but this record is presented with such fulness in the September number of the *Columbia University Quarterly* of each year, that it does not seem necessary or desirable to repeat it here. An indication of the intellectual activity of the University, at the present time, along these lines, is given by the following statement prepared by the Assistant Secretary of the University :

“There are published at Columbia 18 series of serial studies and contributions ; 10 journals are issued under the editorial direction of Columbia officers, and 13 more with their editorial coöperation. There are 9 student publications. The reports to the editor of the *Quarterly* by our officers of their individual work are not specific enough in many cases to make it possible to give definite statistics, but the following figures will give some idea of the scope of this work : There were 22 original volumes published by our officers last year, and to these might be added 9 works published in the different Columbia series by men who were not officers. Most of these were doctors' theses. There were 17 new editions of works already published ; and to these might be added the new edition of the *Classical Heritage of the Middle Ages* by Mr. H. O. Taylor, an ex-officer, which was published as one of the Columbia Univer-

sity studies in Literature. Besides these, 17 books were published under the editorial supervision of Columbia University officers, or were translated by them. More than 372 articles by our professors appeared in scientific and technical journals and encyclopedias, and 58 in literary journals; 96 book reviews have been reported, but the actual number is much larger, as many of our officers do not itemize these in their reports."

The School of Law has shown a marked increase in membership; the total rising, from 380 the year before, to 423. In addition, 21 members of the Senior Class have taken, as Seniors, the **School of Law** work of the first year in law. In addition to these Seniors, there are 41 graduates of Columbia College in the School, as against 31 a year ago. It is perhaps equally noteworthy that there are 40 graduates from Yale College, as against 27 a year ago.

The principal incident of the year was the resignation of Prof. John W. Houston, after two years of service, on account of ill-health. The vacancy thus created has been filled by the appointment of Prof. Henry S. Redfield, A.M., who comes to the School from Cornell University. Prof. Redfield is a graduate of Amherst College, in the Class of 1877. He practised law at Elmira, N. Y., for twenty years. Since 1898, he has taught, with marked success, Practice and Procedure in the College of Law at Cornell. At Columbia, also, he is to give the courses relating to Practice and Pleading. He is well equipped for this work by his experience; and, furthermore, he believes, not only that practice and pleading can be taught successfully in a law school, but



also that, as the law is now practised, a law school is the only place in which adequate instruction upon these subjects can be had at the present day. These courses are, in all law schools, the most difficult to make interesting, and it need scarcely be pointed out that Prof. Redfield's interest in this particular line of work is an important factor in fitting him for the work that he is to do in our School of Law.

The growing enthusiasm and ambition of the students of the Law School have been happily illustrated, this year, by the founding of the *Columbia Law Review*. This periodical has been well received, and during its first year has maintained a high standard. The students of the School will certainly aim to keep it, in succeeding years, worthy of its beginning.

The College of Physicians and Surgeons has added to its fine record another prosperous year. Out of a Fourth-Year Class of 147, 103 secured hospital appointments by competitive examinations. The class that entered the College in October, 1900, was the largest class, save one, of recent years.

During the year under review, Dr. Francis Delafield submitted his resignation as Professor of the Practice of Medicine, to take effect at the end of the academic year. This action, which was taken by Dr. Delafield, in pursuance of a long-formed determination to retire from teaching when he became sixty years of age, brings to an end a service to the College of Physicians and Surgeons that began in 1863, and continued uninterruptedly until 1901. Dr. Delafield's resignation was accepted with regret, and

he was immediately appointed, on the recommendation of the Committee on Honors, Emeritus Professor of the Practice of Medicine. Dr. Delafield is one of the most distinguished of the men who have given to the College of Physicians and Surgeons its great reputation, and his retirement from active duty, although it has been well earned, marks an epoch in the history of the Medical School.

Dr. Delafield has been succeeded by Dr. Walter Belknap James, who has been appointed, in the first instance, after the habit of the School, as Lecturer in the Practice of Medicine. Dr. James is a graduate of Yale College in the Class of 1879, and of the College of Physicians and Surgeons in 1883. Immediately after graduation he served for two years on the resident staff of the Roosevelt Hospital, in the Medical Division. Then he studied in Europe for a year and a half, at the Universities of Berlin, Munich, and Vienna. Upon his return from Europe, in 1887, he was appointed Clinical Assistant in the Department of Medicine at the Vanderbilt Clinic, and since 1889 he has been Clinical Lecturer in Medicine in the College of Physicians and Surgeons. Dr. James has given himself to his new work with enthusiasm, and already the curriculum relating to his Department has been importantly modified. It is characteristic of Dr. Delafield that he endorses the changes that have been made as distinct improvements in methods.

The staff of the College of Physicians and Surgeons has also been strengthened by the appointment of Dr. L. Emmett Holt as Clinical Professor of the Diseases of Children, from and after July 1, 1901.

Interesting evidence of the efficiency of the Sloane

Maternity Hospital has been given during the year by the fact that the Massachusetts General Hospital has entered into arrangements with the Maternity for the training of its nurses in obstetrics. The nurses of the Presbyterian, St. Luke's, Roosevelt, and Mt. Sinai Hospitals also receive their training at the Sloane Maternity. None of these institutions give their diploma until the nurse has received that of the Sloane Maternity.

No notable incident affecting any of the Schools of Applied Science has taken place during the year. In common with all other parts of the University, they show a decided growth, their numbers having increased from 491 to 566. The comparison, by courses, with the two preceding years, is interesting. These figures do not include special students.

The  
Schools of  
Applied  
Science

|                            |       |       |       |
|----------------------------|-------|-------|-------|
| SCHOOL OF MINES :          | 1899  | 1900  | 1901  |
| Mining Engineering.....    | 67    | 90    | 116   |
| Metallurgy .....           | 1     | 2     | 7     |
| SCHOOL OF CHEMISTRY.....   | 34    | 34    | 40    |
| SCHOOL OF ENGINEERING :    |       |       |       |
| Civil Engineering.....     | 61    | 68    | 81    |
| Electrical Engineering.... | 135   | 116   | 110   |
| Mechanical Engineering..   | 38    | 67    | 101   |
| SCHOOL OF ARCHITECTURE..   | 77    | 60    | 58    |
|                            | <hr/> | <hr/> | <hr/> |
|                            | 413   | 437   | 513   |

There has been no year since 1883-84 when the number of students taking the course in Mining has been so large; neither have there been so many in the course in Metallurgy since 1890-91. The course in Chemistry is larger than it has been since 1886-87.

The course in Civil Engineering numbered 84 in 1894-95, but it has not been so large as this year in any year since. The course in Electrical Engineering has fallen from its maximum of 141 in 1897-98, to 110 this year, as a result of the establishment of the course in Mechanical Engineering. The course in Mechanical Engineering, however, numbers 101, so that, taking the two courses together, there has been a net gain of 56 students in these branches during the last four years. In Architecture, we must go back to 1887-88 before we find the School so small as it is at present.

The Special Fund for Mining and Metallurgy, of which record was made in my last report, was increased during the year by the following gifts :

|                              |        |
|------------------------------|--------|
| From A. R. Ledoux.....       | \$300  |
| “ W. B. Devereux.....        | 250    |
| “ W. B. Kunhardt.....        | 2500   |
| “ Catherine T. Kunhardt..... | 2500   |
| “ Robert M. Thompson.....    | 1000   |
| “ E. E. Olcott.....          | 250    |
| “ W. deL. Benedict.....      | 100    |
| “ F. B. T. Rhoades.....      | 100    |
|                              | <hr/>  |
|                              | \$7000 |

This Fund has already been of great value to these two Departments in increasing their equipment, and by it the character of their work will be greatly improved. Indeed, many advantages never offered in the School before will be placed, as a result of these gifts, at the service of the students of Mining and Metallurgy.

Comment was made, under the head of "The College," upon the striking fact that the students prepared for the College meet the test of the entrance examinations in every subject in larger percentage than those that are prepared for the School of Mines. I hope that this result is only temporary ; but it may well command the attention of the teachers of fitting schools. Those who enter the Schools of Applied Science are, on the average, nearly two years older than those who enter the College, and yet they do not come to the University as well prepared. On the other hand, it is pleasant to be able to report that, as compared with the candidates for admission to the Schools of Applied Science last year and the year before, some improvement in the record is shown this year in English, in Mathematics, and in History. There is, unhappily, a falling off in both French and German. In Chemistry, in Physics, and in Drawing there is little if any change.

The high character of the work in the School of Political Science has been steadily maintained throughout the year. Included in the report of the Dean is a statement of the educational and governmental positions to which graduates of the School have been appointed during the last two years. These appointments do not refer only to graduates of the School of the last two years, but they refer to graduates of any year who have obtained either first appointments or who have been advanced to better positions during the last two years. The list is impressive in its details, and it may be summarized as follows.

There have been appointed :

|   |       |
|---|-------|
| As Professors.....  | 9     |
| “ Associate, Assistant, or Adjunct Professors..                               | 6     |
| “ Instructors.....  | 7     |
| “ Tutors.....   | 5     |
| “ Lecturers.....  | 4     |
| “ Assistants.....   | 2     |
| “ Docent.....   | 1     |
|   | <hr/> |
|   | 34    |
| As High School Teachers.....  | 2     |
|   | <hr/> |
| Total of Educational Appointments..   | 36    |
| To positions in the Civil Service of a State, or of<br>the United States..... | 13    |

Several more have obtained positions of public usefulness in connection with the press, with social settlements, or other forms of semi-public activity. The colleges in which these appointments have been made, range from Bowdoin and Yale in the East, to the University of Colorado in the West, and of Texas in the South.

The report of the Dean of the School of Philosophy calls for no special comment. The work of the year has proceeded efficiently and smoothly. The School

In view of the large preponderance of of applications for fellowships and scholar-Philosophy ships under the Faculty of Philosophy, it may be well to give here the figures in this regard. For the 18 University Fellowships and the 7 endowed fellowships in the University, there were this year 171 applicants. Of these 71 sought fellowships under the Faculty of Philosophy; 51 under the Faculty of Political Science; 45 under the Faculty of Pure Science; and 4 under the Faculty of Applied Science. For

the 38 University Scholarships open to men, 94 applications were received. Under the Faculty of Philosophy, 51; under the Faculty of Political Science, 24; and under the Faculty of Pure Science, 19. For the 4 Curtis University Scholarships open to women, there were 12 applicants,—7 under the Faculty of Philosophy, and 5 under the Faculty of Pure Science.

Prof. A. V. W. Jackson, Professor of the Indo-Iranian Languages, was given a leave of absence for the last half of the year to visit India. He was heartily welcomed by the Parsis and others, in recognition of his *Life of Zoroaster*, which has become the standard, and which has made Prof. Jackson an authority with the Parsis on all questions relating to their religion.

I am happy to report a gift of \$500, to be used in 1902 for a Fellowship in Anthropology. This gift is specially noteworthy because it comes from friends outside of the city, living, principally, in Boston and Philadelphia.

The School of Pure Science continues to attract to itself an increasing number of graduate students.

**The School of Pure Science** During the year, a reorganization of the Department of Geology has taken place that goes into effect July 1, 1901. Up to this time, this Department has been organized, as it were, by chance. Its head, Prof. Kemp, has no superior as an economic geologist; but he has not before enjoyed the opportunity of developing his Department along the lines of greatest advantage. The principal change has been to make provision for instruction in palæontology. This branch of the subject will be under the charge of Dr. Amadeus W.

Grabau, as Lecturer, who is a graduate of the Massachusetts Institute of Technology, and a Doctor of Science of Harvard University. Dr. Hollick, who has been for many years connected with the Department as palæobotanist, has joined the staff of the New York Botanical Garden; and the University has transferred to the care of the Garden, in order to facilitate this work there, its collection of palæobotanical specimens and also its books bearing upon that subject.

Several gifts have been made during the year for the benefit of the Department of Zoölogy. Mr. William E. Dodge has continued his subscription to the Marine Biological Laboratory at Naples, for the benefit of this Department; and the Wawepex Society has given once more the John D. Jones Scholarship at the Cold Spring Laboratory. A Trustee has also given \$1000 for the zoölogical examination of the waters of the Great South Bay of Long Island; and the President has assigned to the Department, out of a special fund at his disposal, the sum of \$500 for equipment.

Dr. S. A. Mitchell, Tutor in Astronomy, received an invitation, which he was permitted to accept, to join the U. S. Expedition to Sumatra to observe the total eclipse of the sun.

The School is to be congratulated, also, that, in its laboratories and by one of its professors, so important an invention was perfected as that of Professor Pupin. This invention involves the conservation of the energy of an electric current, in long-distance transmission, by storing it at certain points that bear a fixed relation to the wave-length of the current. The determination of these points was worked out, first of all, theoretically, by mathematical formulæ which were



devised by Professor Pupin himself. Then they were tested and confirmed in the laboratory; and finally upon the lines of the American Telephone Company under conditions of practical operation. Each test fully confirmed the results which had been theoretically obtained. The effect of the invention is greatly to diminish the quantity of wire necessary for long-distance telephoning; reducing the weight of wire to one third, or perhaps even to one fourth, of what has been necessary heretofore. As a consequence, the cost of the construction of a telephone line may be reduced substantially to the extent of the value of the copper thus saved; or, to express the matter in another way, for the same investment one may telephone from three to four times the distance. That is to say, it is now commercially practicable to telephone to San Francisco instead of only to Chicago. Professor Pupin believes that it is now also commercially practicable to telephone across the Atlantic, if that be desired. The invention also enables the cost of underground telephone cables to be greatly reduced, thus avoiding the unsightliness and liability to interruption of overhead lines.

It is worthy of record, and the record may properly be made here, that during the year under review, Professor Cattell, Professor of Psychology, and Professor Prudden, Professor of Pathology, were elected members of the National Academy of Sciences. Professor Cattell's election is especially noteworthy, because he is the first psychologist to be recognized in this way as a man of science. The honor is well-deserved, not only because of his scientific standing, but because of his public spirit. There are few men

more devoted than he to the general welfare of the University; and he gives to the cause of science throughout the country and throughout the world the same disinterested and public-spirited service. In the general interest, and not for any advantage of his own, he serves as editor both of *Science* and of the *Popular Science Monthly*. It is an interesting circumstance that of 12 members added to the National Academy of Sciences during the last three years, 6 have been chosen from Columbia University. It would be hard to illustrate in a more striking way the eminence of the University in scientific lines at the present time.

On the 1st of May, 1901, Miss Laura D. Gill was installed as Dean of Barnard College. Prof. James H. Robinson, who retired from the position of Acting Dean upon the installation of Miss Gill, earned in that capacity the respect and admiration of all who were familiar with his work. Miss Gill was a graduate of Smith College in 1881, from which she also received, in 1885, the degree of Master of Arts. Later, she studied abroad for several years, both at Leipsic and Geneva, and also at the Sorbonne. She has had both administrative and teaching experience at the Burnham School, Northampton, Mass. At the outbreak of the war with Spain, she volunteered as a nurse, and served in that capacity all through the war. Later, she acted as the representative in Cuba of the Cuban Orphan Society, demonstrating anew in this field her general administrative ability. Miss Gill thus brings to the service of Barnard College a character that has been broadened and deepened by such scenes as are

Barnard  
College

incident to war and to the recovery from war, in addition to the tastes and training of a scholar. There is every reason to believe that her unusual combination of equipment and experience will be of great advantage to Barnard College.

By mutual consent, the Morong Herbarium of Barnard College has been deposited, during the year, with the New York Botanical Garden as a part of the Herbarium of Columbia University. This deposit involves no change of ownership.

During the year under review, Barnard College has placed two more of its Departments under the charge of Professors, by providing for the appointment of Benjamin D. Woodward, Ph.D., late Assistant Commissioner-General of the United States at the Paris Exposition, as Adjunct Professor of the Romance Languages and Literatures, to have charge of its Romance Department ; and of Henry E. Crampton, Ph.D., as Adjunct Professor of Zoölogy, to have charge of its Zoölogical Department.

For further details reference is asked to the report of the Dean.

I am happy to report that Teachers College has again added to the strength of the University staff **Teachers College** by the appointment of Dr. David Eugene Smith (at the time of his appointment, Principal of the State Normal School at Brockport, N. Y.) as Professor of Mathematics. Dr. Smith is a graduate and Doctor of Philosophy of Syracuse University. A mathematician of high standing, his specialty is the history of mathematics. Teachers College has also appointed Dr. Thomas D. Wood, as Professor of Physical Education.

The year has been notable for its additions to the material equipment of Teachers College. An essential part of the work of Teachers College centres in the schools of observation and practice which it maintains for the benefit of its student teachers. These schools are two in number,—the Horace Mann School, which is intended to be a model school to be used only as a school of observation ; and the Experimental School, in which no charge is made for tuition, and which is used both for observation and for practice. A year or two ago, Mrs. Cornelia Macy bequeathed to Teachers College the sum of \$200,000. This has been invested in a new building for the Horace Mann School, which occupies the entire block front on Broadway between 120th and 121st Streets. Friends of Teachers College added \$100,000 for the purchase of the land ; and Mrs. Macy's son, Mr. V. Everit Macy, has made himself responsible for whatever sum may be necessary to complete and furnish the building. As an effect of the construction of this new building, which will be ready for use in October, the present buildings of Teachers College that have held heretofore both the College and the Horace Mann School will be entirely available for the College alone. The result will be a substantial enlargement of the facilities of the College as well as of the Horace Mann School.

In the meanwhile, Mr. and Mrs. James Speyer have recently given \$100,000 to Teachers College for the proper housing of the Experimental School, hereafter to be known as the Speyer School, which has been maintained by Teachers College for a number of years in Lawrence Street near Amsterdam Avenue

and 128th Street. Two lots have been bought on West 129th (No. 555) Street, and the building will doubtless be ready for use by October, 1902. An interesting feature of this building will be its adaptation for the uses of a social settlement as well as of a school. It is the hope of the Donors that it will be found practicable, by comparatively slight modifications of plan, to erect a school building that shall be useful to the community in the midst of which it is, not only during school hours but at all hours of the day and night. The University Settlement Society is to coöperate with Teachers College in working out this most interesting problem. If the experiment is successful, it is easy to see how important a contribution will thus be made to the solution of many of the most important city problems.

At the eastern end of Teachers College block, upon Amsterdam Avenue, a large dormitory for women is approaching completion. This is being erected as a business venture by the Morningside Realty Company, a corporation composed of friends of Teachers College. The building has rooms for 230 students, ranging in price from \$70 to \$140 (furnished and with service) ; and it contains also 35 flats for families. There are also 24 suites of two rooms and bath that may be used either by students or outsiders.

This undertaking is of great interest not only to Teachers College, but to the University. The building will afford, under conditions natural to New York, cheap, comfortable, and convenient quarters for a large number of women students in the immediate neighborhood of the University. Roughly speaking, there are five times as many men in the

University as there are women, and it has been to me a matter of no little wonder that no capitalist in the city has been willing to construct a building to meet their need. Dormitories are wanted by the University on the Green, of a type more nearly resembling those to be found elsewhere; but, even when such dormitories are had, there will still be need, in my judgment, for more than one of these large structures in the immediate vicinity of the University, for the accommodation of our men. Such structures as these are the only ones that can afford to give the necessary accommodations cheaply enough to comply with the limitations of the average student's purse. I shall watch, therefore, the outcome of this Teachers College dormitory with the utmost interest; for, if it be successful, it ought to be quickly followed by similar buildings to be used by men. Very few people realize how rapidly the University is growing, since its removal to the new site. The following table shows the number of men students living, even under existing conditions, in the immediate neighborhood of the University—say on the plateau bounded by 110th and 125th Streets and lying between Morningside Park and the Hudson River.

|                        |     |
|------------------------|-----|
| College.....           | 66  |
| Law.....               | 141 |
| Medicine.....          | 10  |
| Applied Science.....   | 130 |
| Political Science..... | 26  |
| Philosophy.....        | 11  |
| Pure Science.....      | 13  |

The report of the Director of the Summer Session shows a healthy growth of this School. There were **The Sum-** 41 courses offered this year, as against 28 **mer Session** the year before. Botany and Geography were omitted from the subjects taught, because it proved impracticable to offer courses in these Departments, this year, on a satisfactory basis. On the other hand, courses were offered in Fine Arts, in German, in Latin, and in the Romance Languages, which were not offered the year before. An interesting feature of the Summer Session was a series of public lectures offered to the students by various officers of the University ; the attendance upon which varied from 50 to 240. Another new feature of the Session, which proved successful, was a series of excursions to points of interest in and about New York, on Saturdays of each week, conducted by Mr. George S. Kellogg, of Teachers College. The attendance upon the Summer Session this year was not only larger than the year before, but it was composed in larger percentage of thoroughly trained students. There were, for example, 152 college graduates, as against 101 the year before ; and 216 graduates of professional schools for teachers, as against 143 the year before. The attendance was drawn from every section of the country, as follows :

|                              |     |
|------------------------------|-----|
| North Atlantic Division..... | 485 |
| South Atlantic Division..... | 29  |
| South Central Division.....  | 20  |
| North Central Division.....  | 34  |
| Western Division.....        | 8   |
| Foreign.....                 | 3   |
| <hr/>                        |     |
| Total.....                   | 579 |

I am happy to report that this Session, like the first, more than met its expenses. The result of the two years is a balance to the credit of the Summer Session of \$6,917.43; a sum which ought to be sufficient to guarantee the permanence of this new departure, even if, in some future year, the returns should be disappointing. The Director's report is so complete that reference is asked to it, for all details. I renew to the Director and his Associates of the Summer Session the thanks of the University for their willing and efficient service in making the Summer Session a success.

The gifts of the year may be summarized as follows :

Gifts

|  |              |
|--|--------------|
| Gifts and bequests for the creation of Trust Funds.. | \$113,305 79 |
| Gifts for Permanent Investment at the New Site...    | 139,188 75   |
| Gifts for the General Guarantee Fund 1899-1900..     | 26,750 00    |
| Gifts for the Interest Fund for 1900-1901.....       | 33,250 00    |
| Gifts for Designated Purposes.....                   | 41,625 00    |
| Total.....   | \$354,119 54 |

Under the first head, "Gifts and bequests for the creation of Trust Funds," the items are as follows :

|  |            |
|--|------------|
| Alexander Moncrief Proudfit Fellowship Fund,<br>Balance of legacy from the estate of Alexander<br>M. Proudfit.....   | \$1,475 00 |
| Maria McLean Proudfit Fellowship Fund,<br>Balance of legacy from same estate.....  | 1,475 00   |
| Campbell Scholarship Fund,<br>A gift of \$3000 each from Miss Maria L. Camp-<br>bell and Miss Catherine B. Campbell, to estab-<br>lish two scholarships in the College in memory<br>of Robert B. Campbell, of the Class of '44, and<br>Henry P. Campbell, of the Class of '47..... | 6,000 00   |
| German Lecture Fund,<br>From Mr. Oswald Ottendorfer, as the nucleus<br>of an endowment for public lectures in German<br>at the University.....   | 1,000 00   |



|  |              |
|--|--------------|
| Dorman B. Eaton Professorship Fund,  |              |
| On account of legacy of \$100,000.....   | \$3,055 79   |
| Dean Lung Professorship of Chinese Fund,   |              |
| From an anonymous friend, through the President, towards the founding of a Department of Chinese Languages, Literatures, Religion, and Law, and especially for the establishment of a Professorship to be known as the Dean Lung Professorship of Chinese..... |              |
|  | 100,000 00   |
| Students' Loan Fund,   |              |
| From President Low, to be added to the principal of this fund.....   |              |
|  | 300 00       |
| <hr/>  |              |
| Total.....   | \$113,305 79 |

With the exception of the Campbell Scholarships, all of these items have been commented upon in previous reports, except the Chinese Professorship.

The gift of \$100,000 for the establishment of a Department of Chinese Languages, Literatures, Religion, and Law is in every way noteworthy. It is a recognition, on the part of one of our fellow-countrymen, of the close relations certain to exist in the future between this country and the ancient empire of China. Out of this conviction as to the close material relationship sure to exist between the two countries has come the belief that, if our intercourse with China is to be creditable to ourselves and helpful to China, it must be founded upon a knowledge, on our part, of what China has been and is, that is as far as possible exact and as little as possible colored by prejudice. This belief, naturally, has led the donor to turn to a university, fortunately ours, as the best agency through which to spread such a knowledge of China among the American people. His hope is

that others who may be moved by the same conviction will coöperate in building up at Columbia University an Oriental Department which shall compare favorably with those already to be found at St. Petersburg, Berlin, and Paris. The very names of these cities are suggestive of the fact that the European nations that aim to be influential in China have already resorted to this policy. It is a striking illustration of the position which Universities have taken in our modern civilization, that governments, as well as individuals, look to them for the information upon which safe and progressive action can be based. This is a sort of service that is characteristic of a university, as distinguished from a college ; and Columbia University, situated as it is in the city of New York, at the very centre of the commercial interests of the country, is singularly well adapted to render a service of this kind. I hope that the far-sighted statesmanship of the Donor of this fund will command from others the hearty coöperation necessary to give to it its full significance. The new Department is in no way confined to the teaching of the Chinese language. It is intended rather to be a department that deals with Chinese civilization in all its aspects. It ought to be broadened out so as to comprehend the civilization of the entire Orient, with which, in the century to come, we are certainly destined to be brought into new and intimate relations. To cover adequately such a field as this will require, not one professorship but several ; and I earnestly hope that the beginning that has been made will be speedily followed by an enlargement of our resources for this purpose.

It seems proper, also, to say at this time, although,

strictly speaking, the fact belongs to the record of another year, that since the first of July the University has received from Dean Lung himself a gift of \$12,000, to be added to the resources of this Department. Dean Lung, as his name implies, is a Chinaman. I doubt whether the history of education supplies the record of any similar gift from a Chinaman to a university of the Western learning. It is certainly auspicious of the response that China is likely to make to the attempt on our part to understand her and to do her justice; and it ought to be a persuasive argument with the generous people of our city still further to strengthen this endowment, that it has received its first accession from a Chinaman of moderate means.

The Gifts for Permanent Investment at the New Site include :

For the Earl Hall Building Fund :

From Mr. William E. Dodge..... \$40,000 00

For the Alumni Memorial Hall :

From the Alumni..... 99,188 75

The givers to the General Guarantee Fund, 1899-1900, are as follows :

|                               |         |
|-------------------------------|---------|
| A Friend.....                 | \$1,000 |
| Samuel D. Babcock .....       | 1,000   |
| H. O. Havemeyer.....          | 1,000   |
| H. C. Fahnestock.....         | 1,000   |
| D. O. Mills.....              | 1,000   |
| William C. Schermerhorn ..... | 1,000   |
| Jacob H. Schiff .....         | 1,000   |
| George F. Baker.....          | 1,000   |
| Seth Low.....                 | 1,000   |
| John S. Kennedy.....          | 1,000   |
| Edward D. Adams.....          | 1,000   |
| J. A. Scrymser .....          | 500     |
| John Crosby Brown.....        | 1,000   |
| Henry Villard.....            | 1,000   |
| James Speyer.....             | 250     |

|                                     |         |
|-------------------------------------|---------|
| Estate of Cornelius Vanderbilt..... | \$1,000 |
| F. Augustus Schermerhorn.....       | 1,000   |
| Messrs. Vermilye & Co.....          | 1,000   |
| Cornelius N. Bliss.....             | 1,000   |
| John Gibb.....                      | 1,000   |
| Isaac N. Seligman.....              | 1,000   |
| Alexander E. Orr.....               | 1,000   |
| W. Bayard Cutting.....              | 1,000   |
| R. Fulton Cutting.....              | 1,000   |
| Mrs. Alfred Corning Clark.....      | 1,000   |
| S. D. Coykendall.....               | 1,000   |
| Mrs. Frederic Bronson.....          | 1,000   |
| J. P. Morgan.....                   | 1,000   |

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\$26,750

The following subscriptions to the Interest Fund have been paid in :

|                                |         |
|--------------------------------|---------|
| J. Seligman.....               | \$1,000 |
| Morris K. Jesup.....           | 1,000   |
| Isaac N. Seligman.....         | 2,000   |
| Henry W. Maxwell.....          | 1,000   |
| Charles Broadway Rouss.....    | 500     |
| Franklin B. Lord.....          | 250     |
| John D. Rockefeller.....       | 5,000   |
| Henry Parish.....              | 1,000   |
| Stuyvesant Fish.....           | 1,000   |
| W. K. Vanderbilt.....          | 5,000   |
| John H. Starin.....            | 500     |
| Seth Low.....                  | 5,000   |
| D. Willis James.....           | 5,000   |
| Mrs. Alfred Corning Clark..... | 5,000   |

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\$33,250

I am glad to be able to add that the Interest Fund for the year just closed will completely offset the amount remaining to the debit of the ~~The Interest Account~~ <sup>Interest Fund</sup>, through subscriptions payable in October.

Several years ago, before our financial problem had taken exact shape, it was evident that, for a number of years, we were certain to have an annual deficiency

on the educational account, in addition to a large interest charge upon our debt. In the spring of 1898, therefore, I obtained subscriptions amounting to \$25,000, more or less, for a fund which has been called the General Guarantee Fund, which subscriptions, for the most part, were for the sum of a thousand dollars a year for the term of five years. Payments under these subscriptions were to be based, primarily, upon the amount of the annual deficiency, although it was pointed out, at the time, that it was the hope of the Trustees gradually to assume the interest charge as a part of the current expenses. Some of the original subscribers to this fund have fallen out by death. Others, however, have come in, so that the amount collected in October last was, as stated, \$26,750.

In the meanwhile, with the closing of our accounts on June 30, 1900, it became possible, for the first time, to state our financial problem with something like exactness. By that time substantially all of our permanent debt had been funded into ten-year three-per-cent. bonds; while our floating debt, for the most part, although not entirely, was offset by property the proceeds of which, when sold, can be used for its liquidation. In the meanwhile, also, our annual deficiency on the current educational account had so far disappeared as to justify the Trustees in believing that the University could be conducted during the academic year of 1901-1902, and thereafter, out of the current income of the University available for this purpose. It also appeared clear to the Trustees that, by the time our ten-year bonds fall due, the University will be able, out of the increase of income

from its fees and endowments, to care for its floating debt without embarrassment to its educational work. Under these circumstances, it appeared to be good judgment to substitute for the General Guarantee Fund, which was founded upon the expectation of an annual deficiency, a new fund to be dedicated specifically to the payment of interest, during the next few years, on so much of our outstanding debt as is not offset by assets available for its liquidation. The needs of the University, under this head, ought, in the natural order of things, to grow smaller and smaller; and, while it is a difficult thing to secure money to be used for the payment of interest, it was believed that the problem could be best handled in this way: first, because the need would last for a few years only; and, second, because the money so given, while nominally given for interest, is practically given to enable the University to maintain its educational work, during this interval, in full vigor and efficiency.

The results of this effort have fully justified the confidence of the Trustees. Of the subscriptions to the General Guarantee Fund, all but the sum of \$5750 have been transferred to the Interest Fund; and in the transfer most of the subscriptions have been importantly increased. Other friends have joined our old ones, with the result, as stated, that the Interest Fund for the year, at this writing completely offsets the interest charge of \$101,983.82. The educational deficiency of the year is only \$8,221.29, as against \$17,328.47, the year before. The operations of the year, also, have effected some decrease in the outstanding debt.

**Gifts for Designated Purposes**      The Gifts for Designated Purposes may be summarized as follows :

|   |             |
|---|-------------|
| For the purchase of books<br>(Details given under the head of the Library)  | \$15,275    |
| For Salaries.....   | 8,200       |
| For Lectures :  |             |
| From Holland Society, for lectures on<br>Dutch Literature.....  | \$ 250      |
| From Friends of the University, for French<br>Lectures.....   | 500         |
|   | <hr/> 750   |
| Special Fund for Mining and Metallurgy<br>(Details given under the head of the School<br>of Applied Science).....   | 7,000       |
| For Zoölogy<br>(Details given under the head of the School<br>of Pure Science).....   | 1,750       |
| For Fellowships, Scholarships and Prizes :  |             |
| Alumni Fellowship, School of Medicine,<br>from the Alumni Association of the Col-<br>lege of Physicians and Surgeons.....   | \$1,500     |
| Annual Fellowship in Greek, from a friend<br>of the University.....   | 500         |
| Annual Fellowship in Sociology, from the<br>University Settlement Society.....  | 500         |
| Towards an annual fellowship, from a<br>friend of the University.....   | 150         |
| The John D. Jones Scholarship in Zoölogy,<br>from the Wawepex Society.....  | 200         |
| The Alumni Association Prize, from the<br>Alumni Association of the College.....  | 50          |
| The Alumni Association Prize of the<br>School of Medicine, to reimburse the<br>University for prize awarded in June,<br>1900, from the Alumni Association of the<br>College of Physicians and Surgeons..... | 500         |
|   | <hr/> 3,400 |

## MISCELLANEOUS

## American School for Oriental Study and Research in Palestine :

|   |    |       |          |
|---|----|-------|----------|
| From W. I. Walter.....  | \$ | 200   |          |
| “ William G. Low.....   |    | 50    |          |
|   |    | <hr/> | \$250    |
| From a friend of the University, to equip<br>a special historical reading-room... |    |       | 5,000    |
|   |    |       | <hr/>    |
|   |    |       | \$41,625 |

The President received in the spring a special gift of \$20,000, to be used for the purchase of books, or at his discretion. Of this sum, he set aside \$10,000 for the purchase of books in 1901-1902, and gave \$5,000 to the Treasurer as stated above for the equipment of an undergraduate reading-room in History. He also supplied, from this fund, the sum of \$500, above referred to, for the purchase of equipment for the department of Zoölogy. The remainder he reserved for use in 1901-1902.

In addition to money actually received, during the year, the University has been notified of the following bequests, which have not yet been paid :

## Bequests

|                                   |                    |
|-----------------------------------|--------------------|
| By the Will of Henry Villard..... | \$50,000           |
| “ “ “ Benjamin D. Silliman.....   | 10,000             |
| “ “ “ Edwin H. Kendall.....       | amount<br>unknown. |

The bequest made by Mr. Villard is absolute, and may be used at the discretion of the Trustees. It is especially interesting, because Mr. Villard, like Mr. Dorman B. Eaton, left a corresponding sum to Harvard University. Both Mr. Eaton and Mr. Villard had special reasons for interest in Harvard University, which they recognized ; but they also recognized



their obligations to the city of New York by showing their appreciation of the services which Columbia University has already rendered, and can still increasingly render, to the city.

Mr. Silliman's bequest is to establish a fellowship in memory of his old friend, William Mitchell, a graduate of Columbia College in the Class of 1820. As such it is doubly welcome.

Mr. Kendall's bequest is for a fellowship in Architecture. This, also, is interesting because Mr. Kendall was a native of Massachusetts who lived and died in New York.

After this summary of the gifts of the year, it only remains to call attention to our needs. It is evident that the most pressing of these is represented **Needs** by the Interest Fund. It is essential, above everything else, that the current work of the University, to which it is already committed, should be maintained in full vigor and efficiency. Gifts to the Interest Fund bear directly upon this object. Gifts for other purposes, however valuable they may be, leave the University with this problem still to be cared for. It goes without saying, on the other hand, that a university like Columbia cannot indefinitely cease to grow; and I count it one of the happy incidents of the year, that the gift for the Dean Lung Professorship of Chinese has introduced the University into a new and wide field of usefulness. This Department ought to be strengthened. We especially need, also, a Professorship in Art, which will not only strengthen the course in Architecture, but which will supply much-needed instruction in æsthetics in the College itself. A liberal culture that offers no

instruction upon art, except as art is represented by archæology and by music, cannot be considered complete. The absence of such a chair in the University, therefore, creates a gap that ought to be filled at the first possible opportunity. Such a chair is the more to be desired, because, in the Metropolitan Museum of Art and in the other art resources of the city, the professor filling it would have at command unexampled resources, so far as America is concerned, for illustration. Other new chairs there are that are greatly to be desired ; and at many points where the University is already at work it may most profitably be strengthened ; but the pressing need of the immediate future, after the Interest Fund has been cared for, is to supply the material facilities that are necessary for our growth. The College, as I have already pointed out, is larger than it has ever been in its history. The building that serves as its headquarters is one of the old buildings that were upon the site when the University purchased it. This building was never adequate for the purpose, and now it has been altogether outgrown. From the point of view of sentiment, also, there should be a College Hall, which will worthily hold the life out of which the entire University has sprung. The Trustees have assigned the southwest corner of the grounds, on the corner of 116th Street and Broadway, for the College Hall. Drawings have been approved which will show to anyone who may be interested the kind of building that is desired. Its estimated cost is \$400,000. I hope that this need will not go long unmet ; for it is a pressing need. Such a need on the part of the old College that has done so much for the city of New

York ought to appeal irresistibly to some one of the many generous givers in our city.

I hope, also, that it will not be long before the University is equipped with a suitable chapel. Daily prayers are now conducted in one of the lecture halls of the University. As I pointed out a year ago, it is a singular fact that Columbia, during all its history, has never had a building entirely consecrated to worship. With the completion of Earl Hall, which is to serve as the headquarters of the spiritual activities of the students, it needs only a suitable chapel to equip the University as appropriately on the side of the spiritual and religious life of the students, as it has been equipped for the development of their intellectual and physical life. The Trustees have assigned for the chapel a site upon the eastern side of the grounds, corresponding exactly to the site of Earl Hall. A suitable building will cost from \$200,000 to \$250,000. I renew my appeal for the gift of this building, in the near future.

In the meanwhile, it must be said that the most immediately helpful form in which a building can be presented to the University, at the moment, is in the form of a dormitory, to be placed upon the Green. Such a building will cost from \$175,000 to \$225,000. I have already pointed out why dormitories seem to be desirable from the point of view of the College, in view of the fact that the College, almost unawares, has been changed, within the last thirty years, from a small local college to a college that is national in the area from which it draws its students, and which is rapidly growing, in size, into the companionship of the larger colleges.

It remains to be said, that, in the judgment of those who are engaged in teaching at Columbia, dormitories are equally desirable as a means of developing at the University a centre of literary and scholarly life. It is believed that the influence upon the work of the graduate students that would grow out of residence upon the grounds, and the companionship that springs from such residence, would be felt importantly for good. Dormitories upon the grounds, also, will certainly result in building up, outside of the grounds, a still stronger residential centre of University students than already exists. It cannot but be that out of such a grouping, within the great city, there will come influences of value that cannot be had in any other way. Our financiers gather in and around Wall Street ; our leather merchants have their headquarters in the Swamp ; and so it goes. The same sort of advantage that comes from the concentration of a given trade in a special quarter will certainly be felt by the students, if, in and about the University, a strong student community can be developed.

There is one other thing to be said for the gift of a dormitory, which, under existing conditions, has for us special importance. Every other building increases the expenses of the University. A dormitory will add to its income. It will add to the income of the University not only directly, by the amount which it produces in excess of the cost of administration ; but dormitories undoubtedly, will add, indirectly also, to the income of the University, by increasing the number of students that will be drawn to it. When Columbia is able to add the privileges of convenient residence at or near the University, for a

charge comparable to the charge made elsewhere for similar privileges, to the advantages that it already offers by reason of its location in the city of New York and its strong equipment, there is almost no limit to the number of students that can be brought to its doors. It is entirely practicable to accomplish this result. By the erection upon The Green of the few dormitories which it will conveniently hold ; and by the erection, in the neighborhood of the University, of one or two large buildings, large enough to permit each room to be rented cheaply, Columbia can be placed in a position to open its really great advantages to the many graduates throughout the country who would gladly come to it except for the item of expense. For all of these reasons, I am persuaded that dormitories for Columbia are greatly to be desired, and I hope that one or more will be given to the University in the near future.

If it seems to the reader of this report that the needs of the University are manifold, he should not therefore be discouraged. Its needs are  
**Conclusion** great, because it is doing great work and because it is developing greatly. If its opportunity were small, or if its determination to meet its opportunity were less strong, its needs would be small, and they would not be greatly felt. But Columbia University is animated by the belief, that, in the city of New York, there can be and there should be a university not second to any university in any city in the world ; and it is also inspired by the conviction that, as this belief is more and more widely accepted throughout the community itself, the University will receive in abundant measure the gifts that will enable

it to grow. In the last statement, a university is made great, not by its scholars but by its teachers ; for where the great teachers are, there the strong scholars are sure to go. The strongest teachers in our day, like the strong men in every other walk of life, prefer to live in cities ; and there is no city in the United States in which they so much like to live as the city of New York. Because Columbia University is in the city of New York, therefore, and because of its resources, which have already lifted it into the front rank of American universities, Columbia University is justified in believing that its future will be worthy of the city with which, as College and University, it has been identified for nearly one hundred and fifty years. Precisely the same argument exists for the use of money for university purposes in the city of New York, as exists for its use here in connection with commerce. This city is the strongest centre of influence in the United States ; and money embarked in the higher education here will just as certainly, in the long run, produce greater results than money embarked elsewhere, as money embarked in commerce here will produce greater results than money embarked in commerce elsewhere ; for, as I have said, the great university is made by its teachers, and the greatest teachers can be commanded by Columbia University precisely in proportion to the resources placed at its command. Naturally, I rejoice in every gift of New York to the higher learning anywhere, for universities are allies and not competitors ; but New York will not fully discharge its duties to the higher learning, until, in addition to strengthening every sound foundation, wherever it

may be, it also builds up and develops in itself, as the place from which every influence goes farthest and with greatest power, a university that is comparable with any other in the world. Such a university Columbia aims to be, and it needs only the support of the generous people of the city to make it and to keep it so.

Respectfully,  
SETH LOW,  
*President.*

## APPENDIX

### VACANCIES

#### *By Death*

- WILLIAM H. DRAPER, M.D., Emeritus Professor of Clinical  
Medicine.  
FREDERICK J. BROCKWAY, M.D., Assistant Demonstrator of Anat-  
omy, and Secretary of the  
Faculty of Medicine.  
LLEWELLYN LE COUNT, C.E., Assistant in Civil Engineering.

#### *By Resignation*

- FRANCIS DELAFIELD, M.D., LL.D., Professor of the Practice of Medi-  
cine.  
ARTHUR HOLLICK, Ph.D., Tutor in Geology.  
ALEXANDER B. JOHNSON, M.D., Instructor in Surgery.  
HERBERT PERCY WHITLOCK, C.E., Assistant in Mineralogy.  
GILBERT VAN INGEN, Curator of the Geological Collec-  
tions.  
WELLINGTON PUTNAM, Lecturer on Elocution.  
JOHN W. HOUSTON, A.M., LL.B., Professor of Law.  
MARSHALL AVERY HOWE, Ph.D., Curator of the Herbarium.  
OSCAR RAYMOND WILSON, B.M.E., Assistant in Mechanical Engineer-  
ing.  
JOHN GARRETT UNDERHILL, Ph.D., Assistant in Comparative Litera-  
ture.  
BARRY HOGARTY, B.S., Assistant in Analytical Chemistry.  
FREDERICK CLARK PAULMIER,  
M.S., Ph.D., Assistant in Zoölogy.  
ALADINE CUMMINGS LONGDEN,  
Ph.D., Assistant in Physics.  
JOHN I. MIDDLETON, M.D., Assistant in Normal Histology.  
CHARLES EDWARD CASPARI, Ph.D., Assistant in Organic Chemistry.  
WILLIAM C. CLARKE, E.M., Assistant in Metallurgy.  
HARDEE CHAMBLISS, M.S., Ph.D., Assistant in Chemistry.



|                               |                                  |
|-------------------------------|----------------------------------|
| PHILIP S. SABINE, M.D.,       | Assistant in Pathology.          |
| CHARLES LEE RAPER, A.B.,      | Lecturer in History.†            |
| GEORGE W. HILL, Sc.D., LL.D., | Lecturer on Celestial Mechanics. |
| FRANK C. HOOPER, Met.E.,      | Instructor in Mining.            |

*By Expiration of Term*

|  |  |
|--|--|
| JOSEPH STRUTHERS, Ph.D.,                 | Honorary Lecturer in Metallurgy.                   |
| GEORGE W. CARY, M.D.,                    | Assistant Demonstrator of Anatomy.                 |
| WILLIAM D. CUTTER, A.B.,                 | Assistant in Physiological Chemistry.              |
| ERNEST NASH WILCOX, M.D.,                | Assistant in Normal Histology.                     |
| PHILIP G. CARLETON, A.B.,                | Tutor in English.                                  |
| CHARLES SIDNEY AYLMER-SMALL, E.E.,       | Assistant in Electrical Engineering.               |
| A. BEZIAT DE BORDES, Ph.D.,              | Lecturer in the Romance Languages and Literatures. |
| MRS. EDITH R. DARRACH,                   | Adviser of Graduate Women Students.                |
| VICTOR COX PEDERSEN, M.D.,               | Assistant Demonstrator of Anatomy.                 |
| BERGEN DAVIS, A.M.,                      | Assistant in Physics.                              |
| THOMAS LITTLE,                           | Chief of the Bureau of Purchases and Supplies.     |
| CHARLES KNAP HITCHCOCK, JR., A.M., E.M., | Assistant in Mining.                               |
| EDWARD B. DURHAM, E.M.,                  | Lecturer in Mining.                                |
| WALTER COLUZZI KRETZ, Ph.D.,             | Lecturer in Astronomy.                             |
| WALTER WHEELER COOK, A.M.,               | Assistant in Mathematics.                          |
| WILLIAM H. ROCKWELL, JR., M.D.,          | Assistant Demonstrator of Anatomy.                 |
| EDWIN B. CRAGIN, M.D.,                   | Secretary of the Faculty of Medicine.              |
| LOUIS H. GRAY, Ph.B.,                    | Lecturer in Indo-Iranian Languages.                |

PROMOTIONS

|                          |                                     |
|--------------------------|-------------------------------------|
| MICHAEL I. PUPIN, Ph.D., | From Adjunct Professor of Mechanics |
|                          | To Professor of Electro-Mechanics.  |
| JOSEPH C. PFISTER, A.M., | From Tutor in Mechanics             |
|                          | To Instructor in Mechanics.         |

† On Barnard College Foundation.

|   |  |
|---|--|
| BENJAMIN DURYEA WOODWARD,<br>Ph.D.,           | From Instructor in the Romance<br>Languages and Literatures<br>To Adjunct Professor of the Ro-<br>mance Languages and Litera-<br>tures.† |
| JAMES MACLAY, C.E., Ph.D.,                    | From Instructor in Mathematics<br>To Adjunct Professor of Mathe-<br>matics.  |
| ADOLPH BLACK, C.E.,                           | From Tutor in Civil Engineering<br>To Instructor in Civil Engineering.   |
| CLARENCE H. YOUNG, Ph.D.,                     | From Instructor in Greek<br>To Adjunct Professor of Greek.   |
| LIVINGSTON FARRAND, A.M., M.D.,               | From Instructor in Psychology<br>To Adjunct Professor of Psychol-<br>ogy.  |
| HENRY CLAPP SHERMAN, Ph.D.,                   | From Lecturer in Analytical<br>Chemistry<br>To Tutor in Analytical Chemistry.  |
| EDMUND HOWD MILLER, Ph.D.,                    | From Instructor in Analytical<br>Chemistry<br>To Adjunct Professor of Analytical<br>Chemistry and Assaying.                              |
| GEORGE FRANCIS SEVER,                         | From Instructor in Electrical En-<br>gineering<br>To Adjunct Professor of Electrical<br>Engineering.                                     |
| HENRY E. CRAMPTON, Ph.D.,                     | From Instructor in Zoölogy †<br>To Adjunct Professor of Zoölogy.†  |
| J. LIVINGSTON RUTGERS MORGAN,<br>B.S., Ph.D., | From Tutor in Chemical Philoso-<br>phy and Chemical Physics<br>To Adjunct Professor of Physical<br>Chemistry.                            |
| MARSTON TAYLOR BOGERT, Ph.B.,                 | From Instructor in Organic Chem-<br>istry<br>To Adjunct Professor of Organic<br>Chemistry.   |
| CAVALIER HARGRAVE JOUET,<br>Ph.D.,            | From Lecturer in Analytical<br>Chemistry.<br>To Tutor in Analytical Chemistry.   |
| HENRY BARGY, A.M.,                            | From Lecturer in the Romance<br>Languages and Literatures †<br>To Tutor in the Romance Lan-<br>guages and Literatures.†                  |

† On Barnard College Foundation.

|                                |   |
|--------------------------------|---|
| SAMUEL OSGOOD MILLER, C.E.,    | From Assistant in Mechanical Engineering<br>To Tutor in Drawing.  |
| WILLIAM A. NITZE, Ph.D.,       | From Lecturer in the Romance Languages and Literatures ‡<br>To Tutor in the Romance Languages and Literatures.‡ |
| EVAN M. EVANS, M.D.,           | From Assistant in Clinical Pathology<br>To Tutor in Medicine and Assistant in Clinical Pathology.               |
| WILHELM ALFRED BRAUN, Ph.D.,   | From Assistant in the Germanic Languages and Literatures ‡<br>To Tutor in German.‡                              |
| MYRON SAMUEL FALK, C.E., M.E., | From Assistant in Civil Engineering<br>To Tutor in Civil Engineering.   |
| FREDERICK PETERSON, M.D.,      | From Instructor in Neurology<br>To Clinical Lecturer on Psychiatry and Instructor in Neurology.                 |
| LEWIS NATHANIEL CHASE, A.M.,   | From Assistant in Comparative Literature<br>To Tutor in Comparative Literature.                                 |

## CHANGES OF TITLE

|                               |   |
|-------------------------------|---|
| ALEXIS A. JULIEN, Ph.D.,      | From Instructor in Geology and Curator<br>To Curator in Geology.                              |
| WALTON MARTIN, M.D.,          | From Assistant Demonstrator of Anatomy and Instructor in Surgery<br>To Instructor in Surgery. |
| D. STUART DODGE JESSUP, M.D., | From Assistant in Normal Histology<br>To Assistant in Clinical Pathology.                     |
| ADAM LEROY JONES, Ph.D.,      | From Assistant in Philosophy<br>To Lecturer in Philosophy.                                    |
| GEORGE N. OLCOTT, Ph.D.,      | From Lecturer in Roman Archæology<br>To Lecturer in Roman Archæology and Assistant in Latin.  |
| JAMES THOMSON SHOTWELL, A.B., | From Assistant in History ‡<br>To Lecturer in History.‡                                       |

‡ In part on Barnard College Foundation.

|                                     |   |
|-------------------------------------|---|
| ELEANOR KELLER, A.B.,               | From Assistant in Chemistry †<br>To Lecturer in Chemistry.†   |
| ADA WATTERSON, A.M.,                | From Assistant in Botany and Zoology †<br>To Assistant in Botany.†  |
| FREDERICK R. BAILEY, M.D.,          | From Tutor in Normal Histology<br>To Tutor in the Normal and Pathological Histology of the Nervous System.  |
| HARLAN FISKE STONE, M.A.,<br>LL.B., | From Lecturer on Domestic Relations and Laws of Persons, on Insurance, Equity Pleading and Practice, and Code Pleading and Practice<br>To Lecturer on Criminal Law, Bailments, and Insurance. |
| FRANK WADLEIGH CHANDLER,<br>Ph.D.,  | From Assistant in Comparative Literature<br>To Lecturer in Comparative Literature.  |
| WALTER B. JAMES, M.D.,              | From Instructor in Medical Diagnosis<br>To Lecturer on the Practice of Medicine.  |

#### APPOINTMENTS

|                                    |   |
|------------------------------------|---|
| FRANCIS DELAFIELD, M.D., LL.D.,    | Emeritus Professor of the Practice of Medicine. |
| WILLIAM HENRY CARPENTER,<br>Ph.D., | Secretary of the University Council.            |
| THOMAS H. HARRINGTON, C.E.,        | Assistant in Mechanical Engineering.            |
| HENRY A. GRIFFIN, M.D.,            | Instructor in Medical Diagnosis.                |
| JAMES D. VOORHEES, M.D.,           | Secretary of the Faculty of Medicine.           |
| HARRY ALONZO CUSHING, Ph.D.,       | Lecturer in History and Constitutional Law.‡    |
| GEORGE HERBERT LING, Ph.D.,        | Tutor in Mathematics.                           |
| RALPH CURTIS RINGWALT, A.B.,       | Lecturer in Public Speaking.                    |
| ROLFE FLOYD, M.D.,                 | Assistant Demonstrator of Anatomy.              |
| EDWARD B. DURHAM, E.M.,            | Lecturer in Mining.                             |

† On Barnard College Foundation.

‡ In part on Barnard College Foundation.

|   |   |
|---|---|
| LEWELLYN LE COUNT, C.E.,                    | Assistant in Civil Engineering.                       |
| FRANK E. PENDLETON, Mech.E.,                | Assistant in Mechanical Engineering.                  |
| CHARLES KNAP HITCHCOCK, Jr.,<br>A.M., E.M., | Assistant in Mining.                                  |
| WILLIAM C. CLARKE, E.M.,                    | Assistant in Metallurgy.                              |
| CARLETON P. FLINT, M.D.,                    | Assistant Demonstrator of Anatomy.                    |
| CHARLES E. BANKER, M.D.,                    | Assistant in Normal Histology.                        |
| HARDEE CHAMBLISS, M.S., Ph.D.,              | Assistant in Chemistry.                               |
| WOLFRAM E. DREYFUS, Ph.D.,                  | Assistant in Analytical Chemistry.                    |
| VIRGINIA C. GILDERSLEEVE, A.M.,             | Assistant in English.†                                |
| ERNEST VALENTINE HUBBARD,<br>M.D.,          | Assistant in Pathology.                               |
| JOSEPH SINGLETON MCCORD, B.S.,              | Assistant in Mineralogy.                              |
| MYRON SAMUEL FALK, C.E., M.E.,              | Assistant in Civil Engineering.                       |
| H. W. SHIMER, A.B.,                         | Assistant in Palæontology.                            |
| GEORGE CANNING HUBBARD, B.S.,               | Assistant in Analytical Chemistry<br>and Assaying.    |
| ABBOT M. CREGIER, Mech.E.,                  | Assistant in Drawing.                                 |
| HOLMES C. JACKSON, Ph.D.,                   | Assistant in Physiological Chemistry.                 |
| JAMES A. MILLER, M.D.,                      | Assistant in Normal Histology.                        |
| DAVID BOVAIRD, M.D.,                        | Tutor in Medicine.                                    |
| NATHANIEL B. POTTER, M.D.,                  | Tutor in Medicine.                                    |
| FREDERICK P. SOLLEY, M.D.,                  | Tutor in Medicine.                                    |
| EDMUND L. DOW, M.D.,                        | Tutor in Medicine.                                    |
| GERTRUDE M. HIRST, A.M.,                    | Assistant in Classical Philology.†                    |
| ELLEN SCOTT DAVISON, A.B.,                  | Lecturer in History.†                                 |
| WILLIAM FINDLAY, A.B.,                      | Tutor in Mathematics.                                 |
| JULIA NELSON COLLES, A.B.,                  | Assistant in Physics.†                                |
| WILLIAM E. KELLICOTT, A.B.,                 | Assistant in Zoology.†                                |
| GEORGE W. HILL, Sc.D., LL.D.,               | Emeritus Lecturer on Celestial Mechanics.             |
| EDWIN B. CRAGIN, M.D.,                      | Secretary of the Faculty of Medicine.                 |
| JAMES DITMARS VOORHEES, M.D.,               | Secretary of the Faculty of Medicine.                 |
| MUNROE SMITH, A.M., J.U.D.,                 | Acting Secretary of the Faculty of Political Science. |
| EDWARD MORGAN LEWIS, A.B.,                  | Lecturer in Elocution.                                |
| EDWARD B. MITCHELL, A.B.,                   | Assistant in Comparative Literature.                  |
| WILMON HENRY SHELDON, Ph.D.,                | Assistant in Philosophy and Education.                |

† On Barnard College Foundation.

|                                |   |
|--------------------------------|---|
| VICTOR J. CHAMBERS, Ph.D.,     | Assistant in Organic Chemistry.                 |
| LOUIS H. GRAY, Ph.D.           | Lecturer in Indo-Iranian Languages.             |
| WALTER COLUZZI KRETZ, Ph.D.,   | Lecturer in Astronomy.                          |
| FRANK W. CHANDLER, Ph.D.,      | Assistant in Comparative Literature.            |
| EVERETT J. HALL,               | Assistant in Metallurgy.                        |
| AUGUSTIN L. J. QUENEAU,        | Tutor in Metallurgy.                            |
| AMADEUS W. GRABAU, S.D.,       | Lecturer in Palæontology.                       |
| GEORGE IRVING FINLAY, A.B.,    | Assistant in Geology.                           |
| CLAYTON MEEKER HAMILTON, A.B., | Tutor in English.                               |
| HENRY STEPHEN REDFIELD, A.M.,  | Professor of Law.                               |
| L. EMMETT HOLT, M.D.,          | Clinical Professor of the Diseases of Children. |
| ALEXIS P. ANDERSON, Ph.D.,     | Curator of the Herbarium.                       |
| GILBERT TOLMAN, A.B.,          | Assistant in Physics.                           |
| CHARLES SAVAGE FORBES, A.B.,   | Assistant in Mathematics.                       |

## LECTURES

(UNDER THE AUSPICES OF THE UNIVERSITY AT LARGE)

### AT THE UNIVERSITY

- December 17. Visible Speech. Professor Alexander Melville Bell.  
" 21. L'Art et le Comédien. M. Constant Coquelin.
- 

Lectures on the Mycenæan Age, especially in Crete. Louis  
Dyer, M.A., of Oxford, England

February 27. Introductory Lecture. Discoveries by Dr. Schliemann  
and Mr. Arthur Evans.

- March 1. The Cretan Alphabet.  
" 4. Old Knossos and the Labyrinth of Minos.
- 

- " 20. The Siege of Peking. Rev. Frank D. Gamewell, who  
constructed the fortifications for the defence of the  
legations.

### AT THE AMERICAN MUSEUM OF NATURAL HISTORY

Metallurgy. Dr. David T. Day, of the United States Geo-  
logical Survey

- January 5. The Mining Outlook of the Opening Century.  
" 12. The World's Mineral Wealth as Shown at the Paris  
Exposition.  
" 19. The Petroleum Industry of the United States.  
" 26. The Mineral Resources of Cuba, Porto Rico, Hawaii,  
and the Philippines.

### Trees, Parks, and Gardens

- February 2. Trees and Plants in the Gardens of the Renaissance.  
Professor A. D. F. Hamlin, of the Department of  
Architecture, Columbia University.

- February 9. The Life of a Tree and of a Forest. Mr. C. P. Warren,  
of the Department of Architecture, Columbia Uni-  
versity.
- " 16. How to Distinguish the Trees. Mr. C. P. Warren.
- " 23. Trees and Shrubs for Shade and Ornaments in Land-  
scape Gardening. Mr. Samuel Parsons, Jr.

Astronomy. Prof. J. K. Rees, of Columbia University

- March 2. The Sun: A Study of its Surface and Surroundings.
- " 9. The Inferior Planets: Mercury, Venus, the Earth, and  
Mars.
- " 16. The Superior Planets: Jupiter, Saturn, Uranus, and  
Neptune.
- " 23. The Use of the Photographic Telescopes in Studying  
the Moon, Minor Planets, Stars, and Nebulæ.
- " 30. Tycho Brahe, the Great Danish Astronomer at the End  
of the Sixteenth Century.

AT THE METROPOLITAN MUSEUM OF ART

European Art and Japanese, Similarities and Differences.  
W. B. Van Ingen

- January 5. Evolution.
- " 12. Deduction.
- " 19. Perspective.
- " 26. Induction.

The Beginnings of Western or European Civilization at  
Mycenæ, Tiryns, Troy, and Cretan Knossos. Louis  
Dyer, Esq., M.A., Oxon.

- February 2. Introduction to the Mediterranean or Mycenæan Cul-  
ture.
- " 9. Dr. Schliemann's Sites: Mycenæ, Tiryns, Troy.
- " 16. Two Newly Discovered Western Alphabets from Crete.
- " 23. The "Labyrinth" or "Palace of Minos" at Knossos in  
Crete.
- March 2. Traces of the "Mycenæans" and their Wares in Egypt.

Michel Angelo Buonarroti and the Renaissance in Italy. Mr.  
Edward R. Smith, of the Avery Library, Columbia  
University



- March 9. The Forerunners.  
 " 16. Life and Work of Michel Angelo to the Death of Julius II. (1513).  
 " 23. Life and work of Michel Angelo—completion.  
 " 30. The Successors.

## AT COOPER UNION

## A Summer in Brittany. Charles Sprague Smith

- January 1. The Stone Age in Brittany; Carnac and its Monuments. 1000 B.C.  
 " 8. From Caesar to Gradlon Mur (Gradlon the Great); Myth and History. 57 B.C. to 750 A.D.  
 " 15. The Winning and Wearing of the Crown; The Story of Nominoë and his Successors. 750 to 940.  
 " 22. Brittany under its Dukes. 940 to 1500.  
 " 29. Breton life and Customs.

## Letters and Manners (third series). James E. Learned

- February 5. Poetry—What is Poetry?—Rhetoric and Poetry—Poetry in Life and Action—In Prose—In the Stricter Sense—Poetry Innate in Man—Its Revealing Power—A Ministry to All—Irrresistible Appeal—Examples and Illustrations.  
 " 12. Christopher Marlowe—Founder of the English Tragic Stage—The Age of Elizabeth—Marlowe's Birth and Early Years—Dramatic Productions—Relations with Shakspere—Poems—His Tragic End—Review of his Chief Works—His Influence on our Literature.  
 " 19. Jeremy Taylor—Flower of the Seventeenth Century Prose—Early Distinction—Political Trouble—Promotion—Personal Character—Taylor's Writings on Toleration—Devotional Works—Stoicism—Persuasiveness and Humor—His Learning and Eloquence.  
 " 26. Signs—The Seeking of every Generation—Popular Superstitions—Friday Enterprises and May Marriages—Fateful Number Thirteen—Remote Origins—Familiar Examples—Classical Instances—Nemesis of the Twentieth Century—Signs of the Future.

## Roman Life and Art. Rev. H. G. Spaulding

- March 5. How Pompeii was Destroyed.  
 " 12. Roman Life and Art in Pompeii.  
 " 19. Ancient Roman Amusements.  
 " 26. The Island of Capri.

(LECTURES UNDER DEPARTMENTAL AUSPICES)  
 AT THE UNIVERSITY

Department of the Germanic Languages and Literatures.

Holland Society Lectures on Dutch Literature. Leonard  
 Charles van Noppen, A.M.

- February 26. Vondel's "Samson"; a Comparison with Milton's  
 "Samson Agonistes."  
 March 5. Vondel's "Adam in Banishment"; a Comparison with  
 the "Adamus Exul" of Grotius and Milton's  
 "Paradise Lost."  
 " 12. Vondel as a Lyrist, with Translations of Some of  
 his Best Lyrics.  
 " 19. Hooft, "The Dutch Tacitus," and the Second Lyrist  
 of his Age.  
 " 26. Huygens, the Poet of Manners, the wit and man of  
 fashion, diplomat and statesman.  
 " 29. The Nieuwe Gids School; Van Eeden, the First Dutch  
 Poet of To-day, and Helene Swarth, the Singer of  
 Moods.
- 
- January 24. Die Poesie in der Prosa des Lebens. Rev. Gustave  
 Gottheil, Ph.D., Rabbi of Temple Emanu-El.  
 " 31. Die zoologische Frage Nordamerikas. Hans M. von  
 Kadich, Ph.D.  
 February 7. Joseph Victor von Scheffel's "Frau Aventure." Mr.  
 Udo Brachvogel.  
 " 14. Der Redacteur, der Stiefbruder des Schriftstellers.  
 Mr. Charles A. Bratter, Foreign Editor of the *Staats-  
 Zeitung*.  
 " 21. Deutsches Studentenleben. Ernst Richard, Ph.D.  
 " 28. Das moderne deutsche Drama. Mr. Heinrich Conried,  
 Director of the Irving Place Theatre.  
 March 7. Heinrich von Kleist. Max F. Blau, Ph.D., Adelphi  
 College.  
 " 14. Lessing und seine Zeit. Rev. August Ulmann, S. T.D.,  
 Rector of Trinity School.  
 " 21. Erinnerungen an Deutschlands grosse Zeit, 1870-71.  
 Illustriert. Louis Viereck, J.U.D., late member of  
 the German Reichstag.

- March 28. *Bildung und Intelligenz*. Mr. George von Skal, Editor of the *Staats-Zeitung*.

#### Department of Indo-Iranian Languages

- January 4. The Inscriptions of the Ancient Persian Kings. Professor A. V. W. Jackson.  
 " 8. The Sacred Books of Ancient Iran. Professor A. V. W. Jackson.  
 " 15. Zoroaster the Prophet of Ancient Iran. Professor A. V. W. Jackson.  
 March 5. The Origin and Development of the Oriental Fable. Montgomery Schuyler, Jr., A. M.  
 " 12. Persian Lyric Poets and European Literature. Arthur F. J. Remy.  
 " 19. Japan, the Key to the Chinese Mind. Ernest F. Fenollosa, formerly Professor of Philosophy in the University of Tokio.  
 " 26. Chinese Ideals in Life, Literature, and Art. Ernest F. Fenollosa.

#### Division of Philosophy and Psychology

- March 12. The British Idealistic Movement. Professor R. Mark Wenley, Ph.D., Sc.D.

#### Faculty of Political Science

- March 22. The Rise of the Dutch Republic. Frederic Harrison,

(Under the auspices of the History Club)

#### Colonial Administration. Mr. Poultney Bigelow

- March 12. The Latin Colonization under Papal Auspices.  
 " 15. Dutch Colonization (including Boers).  
 " 19. The British Empire.  
 " 26. America as a Colonial Power.

#### Department of Romance Languages and Literatures

- November 8. L'Exposition de 1900. Adolphe Cohn.  
 " 15. Le Pays Basque. Béziat de Bordes.  
 " 22. Napoléon II. Adolphe Cohn.

- December 6. Les Congrès à l'Exposition de 1900. Adolphe Cohn.  
 " 13. L'Amiral Coligny. Charles Merle d'Aubigné.  
 " 20. La dernière Année du Siècle. Adolphe Cohn.  
 January 3. Balzac. Adolphe Cohn.  
 " 10. George Sand. Adolphe Cohn.  
 " 17. Alfred de Musset. Adolphe Cohn.  
 " 24. Michelet. Adolphe Cohn.  
 February 14. La Réforme de l'Orthographie française. Adolphe Cohn.  
 " 21. L'Age d'Or de la Litterature espagnole. L. A. Loiseaux.  
 " 28. Un Heros de la Science: Louis Pasteur. Adolphe Cohn.  
 March 7. La France et l'Angleterre pendant le Règne de Victoria. Adolphe Cohn.  
 " 28. Une grande Famille française: Les Broglie. Adolphe Cohn.  
 April 4. Une petite Ville de Province: Montbéliard. Daniel Jordan.  
 " 11. Chateaubriand. Adolphe Cohn.  
 " 18. Jeanne d'Arc dans la Litterature. Henry Bargy.  
 " 25. La Démocratie française au 19me Siècle. Adolphe Cohn.
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### Histoire de la Presse en France au 19me siècle. Gaston Deschamps

- March 14. La Restauration (1814-1830).  
 " 16. Le Gouvernement de Juillet et la deuxième République (1830-1852).  
 " 18. Le second Empire et l'Assemblée Nationale (1852-1875).  
 " 21. La Presse sous la Constitution de 1875.
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### Portuguese Poetry. W. T. Brewster

- April 3. Portuguese Popular Poetry.  
 " 10. The Predecessors of Camoens.  
 " 17. Camoens.  
 " 24. Portuguese Poetry after Camoens.
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Department of Zoölogy  
The Protozoa—Gary N. Calkins, Ph.D.

assisted by William E. Kellicott

Seventh Series of University Lectures in Biology (Dyckman Fund)

- February 15. The Simplest of Living Animals. General Sketch.  
 a. Leeuwenhoek, 1675, and the Discovery of Vorticella.  
 b. Early Fancies and Errors. Muller; C. G. Ehrenberg.  
 c. Protozoa and the Cell-theory of Schleiden and Schwann.  
 d. The Position of Protozoa in Nature.  
 e. The four Principal Types of Protozoan Structure.  
 f. Some Economic Aspects of the Protozoa.
- " 19. The Sarcodine Animals: Naked Bits of Protoplasm.  
 a. Amoeba Proteus: Its Structure and Functions.  
 b. Other Amoeboid Organisms; Foraminifera.  
 c. Sun-animalcula of Fresh and Salt Water.  
 d. Microscopic Shells and Skeletons.  
 e. Functional Adaptations of Shelled Forms.  
 f. Reproduction by Simple Division and its Variations.
- " 26. The Flagellated Organisms, the Most Important Group, Theoretically, of the Protozoa.  
 a. Vegetable Infusoria and Monads. General Sketch.  
 b. The Chief Modifications of the Flagellate Type.  
 c. Food and Food-taking.  
 d. Animals and Plants.  
 e. The Theory of Spontaneous Generation.  
 f. Colony Forms and the Transition to Metazoa.
- March 1. The Malaria Germ and other Sporozoa.  
 a. Parasites and Degeneration. General.  
 b. Gregarines and the Disease of Earthworms.  
 c. Coccidia and the Liver Disease of Rabbits.  
 d. Myxosporidia and Trout-epidemics.  
 e. The Relation of Mosquitos to Malaria of Birds and Man.  
 f. Remedies.
- " 5. Infusoria, the Highest Type of Protozoa.  
 a. The Four Chief Types of Ciliata.  
 b. The Effect of an Attached Mode of Life.  
 c. Adaptation of the Single Cell for Particular Ends.  
 d. Food-taking in Actinobolus and in Suctorina.  
 e. Reproduction and Embryogeny.

- March      8. The Loss of Vitality in Protozoa and its Renewal through Conjugation.
- a. The Attributes of Endless Existence possessed by Protozoa.
  - b. Old Age in Protozoa and the Renewal of Youth.
  - c. The Forms Assumed by Conjugants and the Origin of Sex.
  - d. "Sexual Reproduction" a Misnomer.
  - e. Natural Death the Inability to Rejuvenate.
- March      12. The Protozoon a Physiological Machine.
- a. Animals as Automata.
  - b. Supposed Evidences of Willed Activities.
  - c. The Facts of Digestion, Excretion, Secretion, and Irritability in Protozoa.
  - d. The Reactions of Enucleated Parts of Single Cells.
  - e. The Inadequacy of ordinary Chemical and Physical Explanations of Vital Phenomena.
  - f. Is there a Fundamental Distinction between Living and Lifeless Matter?

# COLUMBIA COLLEGE

## REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1901

*To the President of Columbia University  
in the City of New York.*

SIR:

I beg to submit herewith my report upon the College for the academic year ending June 30, 1901.

The number of students matriculated at the beginning of the year was 475; 1 entered subsequently, making the total number 476, distributed as follows:

|                        |        |
|------------------------|--------|
| Seniors .....          | 89     |
| Juniors .....          | 99     |
| Sophomores .....       | 97     |
| Freshmen .....         | 128    |
| Special Students ..... | 63—476 |

In addition to the above there were eleven university students taking one or more courses in the College, making a total of 487.

The ages of the students (other than university students) at the beginning of the year were as in the following table:

### AGES OF STUDENTS

| Class.           | Number in Class. | Average. | Oldest. | Youngest. |
|------------------|------------------|----------|---------|-----------|
| Senior.....      | 89               | 21.8     | 49      | 18        |
| Junior.....      | 99               | 20.2     | 28      | 18        |
| Sophomore.....   | 97               | 19.3     | 32      | 16        |
| Freshman.....    | 128              | 18.2     | 22      | 15        |
| Special Students | 63               | 21.5     | 59      | 16        |

Number in each class of the following ages:

|                      | Seniors. | Juniors. | Sophomores. | Freshmen. | Specials. |
|----------------------|----------|----------|-------------|-----------|-----------|
| Between 15 and 16 .. | ..       | ..       | ..          | 2         | ..        |
| " 16 and 17 ..       | ..       | ..       | 9           | 14        | 2         |
| " 17 and 18 ..       | ..       | ..       | 15          | 39        | 3         |
| " 18 and 19 1        | 20       | 22       | 28          | 1         |           |
| " 19 and 20 14       | 23       | 26       | 30          | 12        |           |
| " 20 and 21 33       | 28       | 17       | 9           | 14        |           |

|                   | Seniors. | Juniors. | Sophomores. | Freshmen. | Specials. |
|-------------------|----------|----------|-------------|-----------|-----------|
| Between 21 and 22 | 21       | 10       | 4           | 2         | 8         |
| " 22 and 23       | 6        | 11       | 1           | 4         | 3         |
| " 23 and 24       | 4        | 5        | 1           | ..        | 6         |
| " 24 and 25       | 2        | 1        | ..          | ..        | 8         |
| " 25 and 26       | 3        | ..       | 1           | ..        | ..        |
| " 26 and 27       | 1        | ..       | ..          | ..        | ..        |
| " 27 and 28       | 1        | ..       | ..          | ..        | 1         |
| " 28 and 29       | ..       | 1        | ..          | ..        | 1         |
| " 29 and 30       | ..       | ..       | ..          | ..        | 1         |
| " 30 and 31       | ..       | ..       | ..          | ..        | 1         |
| " 32 and 33       | ..       | ..       | 1           | ..        | ..        |
| " 34 and 35       | 1        | ..       | ..          | ..        | ..        |
| " 35 and 36       | 1        | ..       | ..          | ..        | 1         |
| " 49 and 50       | 1        | ..       | ..          | ..        | ..        |
| " 59 and 60       | ..       | ..       | ..          | ..        | 1         |

Of the students admitted, fifty-eight were received on certificates from other colleges, as follows :

| Institution.                       | Senior. | Junior. | Sophomore. | Freshman. | Special. |
|------------------------------------|---------|---------|------------|-----------|----------|
| Adelbert College.....              | ..      | 1       | ..         | ..        | ..       |
| Amherst College.....               | ..      | ..      | ..         | ..        | 1        |
| Brooklyn Polytechnic Institute.... | ..      | ..      | ..         | 1         | ..       |
| Brown University.....              | ..      | ..      | ..         | ..        | 2        |
| Colgate University.....            | ..      | ..      | 1          | ..        | ..       |
| College of the City of New York..  | ..      | 2       | 7          | 4         | ..       |
| Colorado College.....              | ..      | 1       | ..         | ..        | ..       |
| Cornell University.....            | 1       | 1       | 1          | ..        | 1        |
| Dartmouth College.....             | ..      | 1       | ..         | ..        | ..       |
| Dickinson College.....             | ..      | 1       | ..         | ..        | ..       |
| Emory College.....                 | ..      | ..      | ..         | ..        | 1        |
| Harvard University.....            | ..      | 1       | ..         | ..        | ..       |
| Manhattan College.....             | ..      | ..      | 1          | ..        | ..       |
| Princeton University.....          | ..      | ..      | 2          | 1         | 1        |
| St. Francis Xavier College.....    | 1       | ..      | ..         | 1         | ..       |
| St. Stephen's College.....         | 1       | 1       | ..         | ..        | ..       |
| Stetson University.....            | 2       | ..      | ..         | ..        | ..       |
| Syracuse University.....           | ..      | ..      | 1          | ..        | ..       |
| Trinity College.....               | ..      | 1       | ..         | ..        | ..       |
| Union College.....                 | ..      | 1       | ..         | ..        | ..       |
| University of Chicago.....         | ..      | ..      | ..         | ..        | 2        |
| University of Michigan.....        | ..      | 1       | ..         | ..        | ..       |
| University of Minnesota.....       | 1       | 1       | ..         | ..        | ..       |
| University of Nebraska.....        | ..      | ..      | ..         | ..        | 1        |
| University of the South.....       | 1       | ..      | 1          | 1         | ..       |
| University of Texas.....           | ..      | 1       | ..         | ..        | ..       |
| University of West Virginia.....   | 1       | ..      | ..         | ..        | 1        |
| University of Wisconsin.....       | 1       | ..      | ..         | ..        | ..       |
| Ursinus College.....               | 1       | ..      | ..         | ..        | ..       |
| Wesleyan University (Ill.).....    | 1       | ..      | ..         | ..        | ..       |
| Yale University.....               | ..      | ..      | ..         | 1         | ..       |
|                                    | 11      | 14      | 14         | 9         | 10       |



Of the members of the Freshman class, sixty-three were admitted provisionally—that is, with entrance conditions to fulfil. Such students are held under probation till the end of the first half-year. Just prior to the close of the probationary period, the Dean considers the special reports made by heads of departments in the case of each conditioned student, and determines whether he is to be admitted to full standing, have his period extended, or be dropped from the roll.

Under this provision, seventeen were advanced to full standing at the end of the first term; the others had their period of probation extended until the beginning of the next academic year. Seven members of the Freshman class, three of the Junior class, two of the Senior class, and seven special students retired from the College during the year.

Of the ninety-eight members in the Junior class, four were “belated” Seniors—that is to say, were not allowed to matriculate as Seniors because of deficiency in some requirements for advancement to that class; of the ninety-seven members of the Sophomore class, fifteen were, in the same sense, “belated” Juniors; and of the one hundred and twenty-eight members of the Freshman class, twenty-five were, in the same sense, “belated” Sophomores.

Seventy-eight members of the Senior class, seven “belated” students, eighty-five in all, satisfied all the requirements for the baccalaureate degree and had conferred upon them, at the Commencement held on the 12th inst., the degree of Bachelor of Arts.

Nine members of the Senior class failed to satisfy the requirements for a degree, and were not graduated.

The classification of students into three groups, according to the topics presented by them for entrance, which prevailed for several years prior to the present academic year, has been replaced by the system referred to in my last annual report. To enter the Freshman class of the College, fifteen points are required:

The candidate *must* offer

|                             |                   |
|-----------------------------|-------------------|
| English.....                | counting 3 points |
| Elementary Mathematics..... | “ 3 “             |

The candidate may offer any of the following subjects without other restriction than that to offer an advanced subject will involve offering either at the same time or earlier the corresponding elementary subject :

|                            |                   |
|----------------------------|-------------------|
| Elementary Latin.....      | counting 4 points |
| Elementary Greek.....      | " 3 "             |
| Elementary History.....    | " 1 point         |
| Advanced Latin.....        | " 1 "             |
| Advanced Greek.....        | " 1 "             |
| Advanced French.....       | " 1 "             |
| Advanced German .....      | " 1 "             |
| Advanced History.....      | " 1 "             |
| Advanced Mathematics ..... | " 1 "             |
| Advanced Physics.....      | " 1 "             |

The candidate may offer not more than 4 points in all from the three subjects following :

|                        |                   |
|------------------------|-------------------|
| Elementary French..... | counting 2 points |
| Elementary German..... | " 2 "             |
| Spanish.....           | " 2 "             |

The candidate may offer not more than 2 points in all from the five subjects following :

|                         |                  |
|-------------------------|------------------|
| Elementary Physics..... | counting 1 point |
| Chemistry .....         | " 1 "            |
| Botany.....             | " 1 "            |
| Physiography .....      | " 1 "            |
| Zoölogy .....           | " 1 "            |

The combinations practicable under this arrangement are numerous; and while a candidate cannot escape an amount of preliminary preparation not less than that required under the previous system, he has a much wider range of choice.

For this, the first year of the new system, but little change in the subjects hitherto offered for entrance has been made. Of the one hundred and three students admitted on examination to the Freshman class of the present year, fifty-six offered both Greek and Latin for entrance, forty-one offered Latin, and six offered neither Greek nor Latin. While the advantages of the College are, by the restatement of the requirements for admission and the enlargement of choice therein, made available to many who would other-

wise be excluded, the requirements for the degree of Bachelor of Arts remain unchanged—the difference being that a student who enters without Latin, or a modern language, or a natural science with laboratory work, or a knowledge of any one of the subjects required for a degree, must begin the study of that subject in the College and continue it until he can show that he has such acquaintance with it as the regulations prescribe in all cases for the degree of Bachelor of Arts.

By the new regulations, in effect for the first time this year, the number of hours a week which a student must take in each year of his course is not definitely fixed—but varies from twelve to eighteen, at the option of the student; to take a less number than twelve or a greater number than eighteen requires the consent of the Dean, given only for reasons of weight. Not less than nine points are required for advancement from the Freshman to the Sophomore class; not less than twenty-four for advancement to the Junior class; not less than forty-five for advancement to the Senior class; and not less than sixty for the degree of Bachelor of Arts.

The new regulations affecting admission and the privileges of study, taken in connection with the summer sessions of the University, afford an opportunity, if the practice be authorized, of curtailing the time required for obtaining the degree of A.B. In the summer sessions, the courses are so arranged and so given that an industrious and capable student may, by attending two such sessions and passing satisfactory examinations on the six courses which he could thus take, get credit for six points towards his degree. It is therefore evident that for an eager and able student it would be practicable to make the Bachelor's degree in three years: it would simply necessitate his taking six courses in two summer sessions, and eighteen hours a week for each of the three years. While this is feasible, it does not appear to be, so far at least, attractive. But two inquiries have been made of me with regard to such a scheme of study, and I know of no student

who is attempting it. I venture to hope that the principal use made of the freedom to take as many as eighteen hours a week in one year will be to secure time, in the two latter years of the course, for thorough study of a few subjects, for reflection, and for use of the library.

I insert here, as a matter of interest, a table giving the number of hours a week taken by the students in the several classes (of the Seniors, six are unaccounted for in the table, five having taken the full first-year course in medicine, and one the full first-year course in one of the Schools of Applied Science).

| Hours<br>a week | Freshmen<br>(128) | Sophomores<br>(97) | Juniors<br>(99) | Seniors<br>(89) |
|-----------------|-------------------|--------------------|-----------------|-----------------|
| 11              | ..                | ..                 | 1               | ..              |
| 12              | 3                 | 1                  | ..              | 1               |
| 13              | 1                 | 2                  | 1               | 1               |
| 14              | 4                 | 4                  | 11              | 13              |
| 15              | 56                | 10                 | 31              | 13              |
| 16              | 15                | 24                 | 15              | 23              |
| 17              | 15                | 25                 | 13              | 13              |
| 18              | 27                | 16                 | 22              | 9               |
| 19              | 4                 | 11                 | 2               | 9               |
| 20              | 2                 | 3                  | 3               | 1               |
| 21              | 1                 | 1                  | ..              | ..              |

Outside of the prescribed subjects of study the students of the College have during the past year made choice of electives as follows:

| Subjects Elected.            | Freshman Class.            |             | Sophomore Class.           |             | Junior Class.              |             | Senior Class.              |             | Special Students           |             | Gross Total. | To be deducted for students electing more than one course in any department. |            |         |         |          | Individuals. |
|------------------------------|----------------------------|-------------|----------------------------|-------------|----------------------------|-------------|----------------------------|-------------|----------------------------|-------------|--------------|--|------------|---------|---------|----------|--------------|
|                              | Number of Courses Elected. | Attendance. | Number of Courses Elected. | Attendance. | Number of Courses Elected. | Attendance. | Number of Courses Elected. | Attendance. | Number of Courses Elected. | Attendance. |              | Freshman.  | Sophomore. | Junior. | Senior. | Special. |              |
| Anatomy .....                | ..                         | ..          | ..                         | ..          | ..                         | ..          | 1                          | 5           | ..                         | ..          | 5            | ..   | ..         | ..      | ..      | ..       | 5            |
| Anthropology .....           | ..                         | ..          | ..                         | ..          | ..                         | ..          | 2                          | 4           | ..                         | ..          | 4            | ..   | ..         | ..      | 1       | ..       | 3            |
| Architecture .....           | ..                         | ..          | ..                         | ..          | ..                         | ..          | ..                         | ..          | ..                         | ..          | ..           | ..   | ..         | ..      | ..      | ..       | ..           |
| Astronomy .....              | ..                         | ..          | 1                          | 1           | 1                          | 1           | 2                          | 10          | 1                          | 2           | 14           | ..   | ..         | ..      | ..      | ..       | 14           |
| Botany .....                 | 1                          | 1           | 1                          | 4           | 5                          | 6           | 2                          | 3           | ..                         | ..          | 14           | ..   | ..         | 1       | 1       | ..       | 12           |
| Chemistry .....              | 12                         | 12          | 5                          | 33          | 4                          | 22          | 5                          | 10          | 9                          | 15          | 92           | ..   | 1          | 1       | 3       | 5        | 82           |
| Civil Engineering .....      | ..                         | ..          | 1                          | 2           | 1                          | 2           | ..                         | ..          | ..                         | ..          | 4            | ..   | ..         | ..      | ..      | ..       | 4            |
| Comparative Literature ..... | 10                         | 10          | 4                          | 31          | 4                          | 66          | 4                          | 40          | 5                          | 21          | 168          | ..   | 2          | 6       | 7       | 1        | 152          |
| Economics .....              | ..                         | ..          | 5                          | 30          | 5                          | 36          | 7                          | 53          | 6                          | 25          | 144          | ..   | 6          | 5       | 19      | 9        | 105          |
| Education .....              | ..                         | ..          | ..                         | ..          | 4                          | 7           | 12                         | 42          | 5                          | 0           | 58           | ..   | ..         | 4       | 25      | 2        | 27           |
| Electrical Engineering ..    | ..                         | ..          | ..                         | ..          | ..                         | ..          | 2                          | 2           | 1                          | 1           | 3            | ..   | ..         | ..      | ..      | ..       | 3            |
| English .....                | ..                         | ..          | 7                          | 76          | 12                         | 149         | 14                         | 50          | 13                         | 52          | 336          | ..   | 19         | 73      | 23      | 17       | 204          |
| French .....                 | 22                         | 22          | 6                          | 45          | 6                          | 22          | 7                          | 15          | 6                          | 18          | 122          | ..   | ..         | ..      | 2       | 1        | 119          |
| Geology .....                | ..                         | ..          | 5                          | 5           | 2                          | 7           | 1                          | 5           | 1                          | 1           | 18           | ..   | ..         | ..      | ..      | ..       | 18           |
| German .....                 | 36                         | 36          | 8                          | 58          | 13                         | 40          | 8                          | 23          | 6                          | 17          | 174          | ..   | 3          | 5       | 6       | 1        | 150          |
| Greek .....                  | 20                         | 20          | 2                          | 19          | 3                          | 17          | 6                          | 10          | 3                          | 4           | 79           | ..   | ..         | ..      | 3       | ..       | 76           |
| History .....                | 27                         | 27          | 6                          | 14          | 9                          | 56          | 10                         | 74          | 7                          | 26          | 197          | ..   | ..         | 11      | 23      | 3        | 160          |
| Indo-Iranian .....           | ..                         | ..          | ..                         | ..          | 1                          | 1           | 3                          | 4           | ..                         | ..          | 5            | ..   | ..         | ..      | 1       | ..       | 4            |
| Italian .....                | ..                         | ..          | 1                          | 2           | 2                          | 3           | 1                          | 1           | ..                         | ..          | 6            | ..   | ..         | ..      | ..      | ..       | 6            |
| Latin .....                  | ..                         | ..          | 7                          | 45          | 6                          | 19          | 8                          | 18          | 5                          | 12          | 94           | ..   | ..         | 3       | 5       | 1        | 85           |
| Mathematics .....            | 5                          | 5           | 7                          | 47          | 5                          | 15          | 3                          | 3           | 3                          | 6           | 76           | ..   | 18         | 6       | ..      | 1        | 51           |
| Mechanical Engineering ..    | ..                         | ..          | 4                          | 11          | 3                          | 6           | 7                          | 12          | 3                          | 3           | 32           | ..   | 2          | 2       | 10      | ..       | 18           |
| Mechanics .....              | ..                         | ..          | 1                          | 1           | 1                          | 1           | 1                          | 1           | ..                         | ..          | 3            | ..   | ..         | ..      | ..      | ..       | 3            |
| Mineralogy .....             | ..                         | ..          | 1                          | 1           | 3                          | 3           | ..                         | ..          | 2                          | 2           | 6            | ..   | ..         | 2       | ..      | 1        | 3            |
| Municipal and Private Law .. | ..                         | ..          | ..                         | ..          | ..                         | ..          | 8                          | 168         | ..                         | ..          | 168          | ..   | ..         | ..      | 147     | ..       | 21           |
| Music .....                  | ..                         | ..          | 1                          | 1           | 4                          | 4           | 6                          | 14          | 8                          | 23          | 42           | ..   | 1          | ..      | 6       | 9        | 26           |
| Normal Histology .....       | ..                         | ..          | ..                         | ..          | ..                         | ..          | 1                          | 5           | ..                         | ..          | 5            | ..   | ..         | ..      | ..      | ..       | 5            |
| Philosophy .....             | ..                         | ..          | 3                          | 7           | 3                          | 32          | 5                          | 17          | 4                          | 14          | 70           | ..   | 1          | 10      | 2       | ..       | 57           |
| Physiology .....             | ..                         | ..          | ..                         | ..          | ..                         | ..          | 1                          | 5           | ..                         | ..          | 5            | ..   | ..         | ..      | ..      | ..       | 5            |
| Psychology .....             | ..                         | ..          | 1                          | 15          | 4                          | 20          | 5                          | 23          | 1                          | 13          | 71           | ..   | ..         | ..      | 5       | ..       | 66           |
| Physics .....                | 27                         | 27          | 4                          | 31          | 2                          | 10          | 2                          | 3           | 2                          | 6           | 77           | ..   | ..         | ..      | ..      | ..       | 77           |
| Semitic .....                | ..                         | ..          | 1                          | 1           | 1                          | 2           | 1                          | 1           | ..                         | ..          | 4            | ..   | ..         | ..      | ..      | ..       | 4            |
| Sociology .....              | ..                         | ..          | ..                         | ..          | 1                          | 1           | 1                          | 8           | 1                          | 1           | 10           | ..   | ..         | ..      | ..      | ..       | 10           |
| Spanish .....                | ..                         | ..          | 1                          | 4           | 2                          | 7           | 1                          | 8           | 2                          | 4           | 23           | ..   | ..         | ..      | ..      | 1        | 22           |
| Zoölogy .....                | ..                         | ..          | 1                          | 1           | 2                          | 12          | 2                          | 4           | 2                          | 2           | 19           | ..   | ..         | ..      | ..      | ..       | 19           |

The following table shows the number of College students during the last four years who have begun the study of Greek, French, German, Chemistry, Physics, Botany, and Zoölogy :

# DEAN'S REPORT

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|                 | 1897-98.  |            |         |         |          | Total. | 1898-99.  |            |         |         |          | Total. | 1899-1900. |            |         |         |          | Total. | 1900-1901. |            |         |         |          | Total. |
|-----------------|-----------|------------|---------|---------|----------|--------|-----------|------------|---------|---------|----------|--------|------------|------------|---------|---------|----------|--------|------------|------------|---------|---------|----------|--------|
|                 | Freshman. | Sophomore. | Junior. | Senior. | Special. |        | Freshman. | Sophomore. | Junior. | Senior. | Special. |        | Freshman.  | Sophomore. | Junior. | Senior. | Special. |        | Freshman.  | Sophomore. | Junior. | Senior. | Special. |        |
| Greek .....     | 1         | 1          | ..      | 1       | ..       | 3      | 1         | ..         | ..      | ..      | 1        | 2      | 2          | 2          | ..      | ..      | 4        | 5      | ..         | ..         | 2       | 7       |          |        |
| French .....    | 39        | 4          | 2       | ..      | 6        | 51     | 49        | 4          | ..      | ..      | 5        | 58     | 36         | 3          | 5       | 1       | 2        | 35     | 12         | 5          | 5       | 2       | 59       |        |
| German .....    | 45        | 2          | 4       | 1       | 2        | 54     | 47        | 1          | 1       | ..      | 6        | 55     | 43         | 9          | 3       | 5       | 3        | 40     | 8          | 5          | 4       | 6       | 63       |        |
| Chemistry ..... | 15        | 6          | 33      | 8       | 5        | 67     | 21        | 10         | 22      | 10      | 8        | 71     | 20         | 18         | 22      | 7       | 15       | 24     | 30         | 21         | 7       | 11      | 93       |        |
| Physics .....   | 12        | 14         | 10      | 2       | 5        | 43     | 27        | 14         | 12      | 6       | 6        | 65     | 37         | 10         | 11      | 9       | 7        | 41     | 33         | 10         | 3       | 6       | 93       |        |
| Botany .....    | ..        | 2          | 6       | 2       | ..       | 10     | ..        | 6          | 6       | 3       | 2        | 17     | ..         | 4          | 2       | 3       | ..       | 9      | 1          | 4          | 5       | 2       | ..       | 12     |
| Zoölogy .....   | ..        | 3          | 10      | 4       | ..       | 17     | ..        | 2          | 11      | 8       | 1        | 22     | ..         | ..         | 9       | 10      | 3        | 22     | ..         | 1          | 12      | 4       | 2        | 19     |

There are two prizes for bestowal upon members of the graduating class: The Prize of the Alumni Association and the Chanler Historical Prize.

The three students nominated by the Faculty and submitted to the Senior class as candidates for the Alumni Prize of \$50, given annually by the Association of the Alumni to the "most faithful and deserving students of the graduating class," were Elliott Williams Boone, George Laurence Donnellan, and Charles Savage Forbes; and George Laurence Donnellan was chosen by the class to receive the prize.

The Chanler Historical Prize, consisting of the income of a fund of \$1000 bequeathed by J. Winthrop Chanler, of the Class of 1847, and given annually to that member of the graduating class who shall be the author of the best original manuscript essay in English prose on the history of civil government in America, or some other historical subject assigned by the Faculty, was awarded at Commencement to Charles Savage Forbes for an essay upon "The Clayton-Bulwer Treaty."

Five scholarships of the annual value of one hundred and fifty dollars each during the College course are open for competition to candidates for admission to the Freshman class who were examined in June and pass complete entrance examinations in all subjects.

The Alumni competitive scholarship, open to all candidates. The papers of the candidates who pass a satisfactory examination are considered by the Committee on Admissions, and the one whose papers as a whole are entitled to the highest rank is awarded the scholarship. At the recent examinations, this scholarship was awarded to Edward Sapir, De Witt Clinton High School of Manhattan, general average 90.6 per cent. of a possible maximum.

A Hewitt or Harper Scholarship, open for competition to graduates of the New York City High Schools. At the recent examinations, a Hewitt Scholarship was awarded to W. S. Messer, Boys' High School of Brooklyn, general average 85.6 per cent.

Three Brooklyn scholarships open for competition to candidates who are residents of Brooklyn, N. Y., and have received their training in either the public or the private schools of that borough. The papers of the qualified competitors who pass a satisfactory examination are considered by the Committee on Admissions, and the three candidates whose papers as a whole are entitled to the highest rank are awarded the scholarships. At the recent examinations these scholarships were awarded to: Joseph Tolchinsky, Boys' High School, average 83.6 per cent.; J. L. Waldron, Boys' High School, 78.2 per cent.; P. M. Smith, Boys' High School, average 76.0 per cent.

The conduct of examinations for admission has recently been materially changed. The Association of Colleges and Preparatory Schools in the Middle States and Maryland, at a meeting held in Trenton, N. J., December 2, 1899, adopted resolutions urging the early establishment of a joint College Admission Examination Board, composed of representatives of colleges and of secondary schools in the Middle States and Maryland which shall "hold or cause to be held, at convenient points, in June of each year, a series of college admission examinations . . . and issue certificates based upon the results of such examinations"; and requesting the several colleges in the Middle States and Maryland to accept such certificates, "so far as they go, in lieu of their own separate admission examinations." Such a Board, styled "College Entrance Examination Board," was accordingly organized at a conference of delegates from colleges and preparatory schools within the territory covered by the Association, held in the Trustees' Room of Columbia College on May 12, 1900; and Columbia subsequently agreed to appoint a representative on that Board, to substitute the Board's entrance examinations for those of the College, taking care at the same time that such administrative regulations were framed as might be necessary to carry the substitution into effect without prejudicing the rights and opportunities of any candidate offering himself for admission to Columbia College.



| Number of candidates for admission..... | June, 1898<br>214          |             |                       | June, 1899<br>173          |             |                       | June, 1900<br>208          |             |                       | June, 1901<br>228          |             |                       |
|---|----------------------------|-------------|-----------------------|----------------------------|-------------|-----------------------|----------------------------|-------------|-----------------------|----------------------------|-------------|-----------------------|
|   | No. taking<br>examinations | No. passing | Percentage<br>passing | No. taking<br>examinations | No. passing | Percentage<br>passing | No. taking<br>examinations | No. passing | Percentage<br>passing | No. taking<br>examinations | No. passing | Percentage<br>passing |
| <i>English</i>                          |                            |             |                       |                            |             |                       |                            |             |                       |                            |             |                       |
| Reading and Composition.....            | 138                        | 102         | 74                    | 107                        | 82          | 77                    | 142                        | 116         | 82                    | 133                        | 96          | 72                    |
| Study and Composition.....              | 111                        | 87          | 78                    | 87                         | 65          | 75                    | 98                         | 73          | 74                    | 114                        | 84          | 71                    |
| <i>Mathematics—Elementary</i>           |                            |             |                       |                            |             |                       |                            |             |                       |                            |             |                       |
| Algebra to Quadratics.....              | 127                        | 92          | 72                    | 113                        | 92          | 81                    | 154                        | 102         | 66                    | 147                        | 131         | 89                    |
| PPlane Geometry.....                    | 111                        | 101         | 91                    | 100                        | 86          | 86                    | 119                        | 88          | 74                    | 134                        | 90          | 67                    |
| Quadratics.....                         | 12                         | 8           | 67                    | 13                         | 10          | 76                    | 114                        | 70          | 61                    | 128                        | 108         | 84                    |
| <i>Advanced</i>                         |                            |             |                       |                            |             |                       |                            |             |                       |                            |             |                       |
| Algebra.....                            | 9                          | 6           | 67                    | 13                         | 11          | 85                    | 21                         | 9           | 43                    | 26                         | 22          | 77                    |
| Solid Geometry.....                     |                            |             |                       |                            |             |                       | 23                         | 13          | 56                    | 22                         | 21          | 95                    |
| Plane Trigonometry.....                 |                            |             |                       |                            |             |                       | 7                          | 6           | 8.5                   | 23                         | 16          | 70                    |
| <i>History—Elementary</i>               |                            |             |                       |                            |             |                       |                            |             |                       |                            |             |                       |
| Greek History.....                      |                            |             |                       |                            |             |                       | 17                         | 13          | 76                    | 28                         | 24          | 85                    |
| Roman History.....                      |                            |             |                       |                            |             |                       | 24                         | 20          | 83                    | 30                         | 26          | 86                    |
| English History.....                    | 2                          | 1           | 50                    | 22                         | 16          | 73                    | 35                         | 18          | 51                    | 38                         | 31          | 81                    |
| American History.....                   | 3                          | 2           | 67                    | 30                         | 28          | 93                    | 33                         | 26          | 78                    | 37                         | 29          | 78                    |
| Advanced History.....                   |                            |             |                       |                            |             |                       |                            |             |                       | 1                          | 0           | 0                     |
| <i>Latin—Elementary</i>                 |                            |             |                       |                            |             |                       |                            |             |                       |                            |             |                       |
| Cicero.....                             | 7                          | 4           | 57                    | 75                         | 65          | 87                    | 116                        | 111         | 95                    | 101                        | 65          | 64                    |
| Special Text.....                       | 8                          | 3           | 50                    | 72                         | 39          | 54                    |                            |             |                       |                            |             |                       |
| Vergil.....                             | 7                          | 4           | 57                    | 58                         | 42          | 72                    | 100                        | 89          | 89                    | 96                         | 63          | 66                    |
| Sight Major.....                        | 2                          | 0           | 0                     | 38                         | 20          | 79                    | 139                        | 120         | 86                    | 100                        | 57          | 57                    |
| Sight Minor.....                        | 8                          | 2           | 25                    | 81                         | 66          | 81                    |                            |             |                       |                            |             |                       |
| Prose Composition.....                  | 2                          | 1           | 50                    | 45                         | 27          | 60                    | 113                        | 83          | 73                    | 62                         | 28          | 45                    |
| Advanced Latin.....                     |                            |             |                       |                            |             |                       | 0                          | 0           | 0                     | 2                          | 1           | 50                    |
| <i>Latin (Old Requirements)*</i>        |                            |             |                       |                            |             |                       |                            |             |                       |                            |             |                       |
| Cesar.....                              | 120                        | 110         | 92                    | 10                         | 9           | 90                    |                            |             |                       |                            |             |                       |
| Cicero.....                             | 116                        | 66          | 57                    | 45                         | 38          | 84                    |                            |             |                       |                            |             |                       |
| Vergil.....                             | 118                        | 105         | 89                    | 28                         | 20          | 72                    |                            |             |                       |                            |             |                       |
| Prosody.....                            | 116                        | 78          | 67                    | 36                         | 25          | 69                    |                            |             |                       |                            |             |                       |
| Grammar and Composition.....            | 117                        | 66          | 56                    | 49                         | 32          | 65                    |                            |             |                       |                            |             |                       |

|   |    |    |     |  |    |     |  |
|---|----|----|-----|--|----|-----|--|
| <i>Greek—Elementary</i>                   |    |    |     |  |    |     |  |
| Attic Prose and Greek Grammar .....       | 3  | 2  | 67  |  | 42 | 71  |  |
| Homer.....                                | 1  | 0  | 0   |  | 22 | 86  |  |
| Composition .....                         | 1  | 1  | 100 |  | 19 | 64  |  |
| Advanced Greek.....                       |    |    |     |  | 14 |     |  |
| <i>Greek (Old Requirements)*</i>          |    |    |     |  |    |     |  |
| Anabasis, I, II.....                      | 90 | 73 | 81  |  | 11 | 79  |  |
| Anabasis, III, IV.....                    | 88 | 60 | 68  |  | 21 | 66  |  |
| Homer.....                                | 96 | 73 | 76  |  | 38 | 92  |  |
| Grammar and Composition.....              | 99 | 42 | 42  |  | 22 | 58  |  |
| <i>French—Elementary</i>                  |    |    |     |  |    |     |  |
| Translation from French.....              | 88 | 46 | 52  |  | 71 | 80  |  |
| Grammar and Translation into French.....  | 89 | 37 | 42  |  | 48 | 68  |  |
| <i>Advanced</i>                           |    |    |     |  |    |     |  |
| Translation from French.....              |    |    |     |  | 57 |     |  |
| Grammar and Translation into French.....  |    |    |     |  | 71 |     |  |
| <i>German—Elementary</i>                  |    |    |     |  |    |     |  |
| Translation from German.....              | 70 | 57 | 81  |  | 54 | 79  |  |
| Grammar and Translation into German.....  | 70 | 51 | 73  |  | 52 | 75  |  |
| <i>Advanced</i>                           |    |    |     |  |    |     |  |
| Translation from German.....              |    |    |     |  | 68 |     |  |
| Grammar and Translation into German.....  |    |    |     |  | 69 |     |  |
| <i>Spanish</i>                            |    |    |     |  |    |     |  |
| Translation from Spanish.....             |    |    |     |  |    |     |  |
| Grammar and Translation into Spanish..... |    |    |     |  |    |     |  |
| <i>Botany</i>                             |    |    |     |  |    |     |  |
| Theory.....                               | 1  | 0  | 0   |  | 2  | 100 |  |
| Laboratory.....                           | 1  | 0  | 0   |  | 2  | 50  |  |
| <i>Chemistry</i>                          |    |    |     |  |    |     |  |
| Theory.....                               | 4  | 3  | 75  |  | 15 | 94  |  |
| Laboratory.....                           | 3  | 2  | 67  |  | 16 | 88  |  |
| <i>Physics—Elementary</i>                 |    |    |     |  |    |     |  |
| Theory.....                               | 5  | 5  | 100 |  | 13 | 92  |  |
| Laboratory.....                           | 5  | 5  | 100 |  | 13 | 77  |  |
| <i>Advanced</i>                           |    |    |     |  |    |     |  |
| Physiology.....                           |    |    |     |  |    |     |  |
| Zoology.....                              |    |    |     |  |    |     |  |

\* Beginning June, 1900, no longer required; superseded by new requirements.

The College Entrance Examination Board held admission examinations at prominent points throughout the country June 17-22. The results, so far as this College is concerned, are given in the following table :

|  |     | In<br>1900 |
|--|-----|------------|
| Preliminary : those who took part of their examination and are candidates for the class entering in October, 1902 .....        | 82  | 90         |
| Final : those who took the preliminary examination a year ago and are candidates for the class entering in October, 1901 ..... | 74  | 54         |
| Full : those who take the entire examination at once and are candidates for the class entering in October, 1901 .....          | 72  | 55         |
| Special Students .....   | ..  | 3          |
| Total .....  | 228 | 202        |

An addition to the number of candidates for entrance will unquestionably be made in the fall when our own Committee on Admissions will hold examinations specifically for those who wish to enter here and did not present themselves to the College Entrance Examination Board in June.

It would be premature to attempt, at this time, any extended remarks upon the utility and the effect of the substitution of examinations to which I have referred. From the great care and good judgment displayed by the responsible officers of the College Entrance Examination Board, from the skill and fairness of the Committee that framed the test questions in various subjects, from the qualifications and character of the readers engaged to pass upon the answers returned by candidates, from the great number of places throughout the whole extent of the United States at which examinations are held under authorized and competent examiners, from the wide public attention consequently called to the subject, and from the intrinsic excellence and great diversity of the opportunities offered by Columbia to college students, I believe that the operations of the College Entrance Examination Board will redound to the advantage

of college education in general and of Columbia College in particular.

The following table and that given on pages 94 and 95 give interesting information in regard to the incoming Freshmen of recent years :

AGES OF COLLEGE FRESHMEN SINCE 1891-92

|  | 1891-92 | 1892-93 | 1893-94 | 1894-95 | 1895-96 | 1896-97 | 1897-98 | 1898-99 | 1899-00 | 1900-01 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Number in class .....                            | 86      | 65      | 56      | 68      | 71      | 101     | 108     | 136     | 119     | 128     |
| Maximum age.....                                 | 23      | 23      | 22      | 23      | 22      | 27      | 46      | 22      | 24      | 22      |
| Minimum age.....                                 | 14      | 14      | 15      | 15      | 16      | 15      | 15      | 15      | 15      | 15      |
| Average age.....                                 | 17.8    | 17.4    | 17.5    | 17.7    | 17.7    | 17.8    | 18.4    | 18.1    | 18.3    | 18.2    |
| Percentage under 17 years..                      | *       | *       | *       | 19.1    | 19.7    | 16.8    | 12.9    | 22.8    | 18.5    | 12.5    |
| Percentage between 17 years<br>and 18 years..... | *       | *       | *       | 35.3    | 32.3    | 26.7    | 31.5    | 19.1    | 30.3    | 30.5    |
| Percentage over 18 years...                      | *       | *       | *       | 45.6    | 48.0    | 56.5    | 55.6    | 58.1    | 51.2    | 57.0    |

Table showing the number and percentage of candidates passing in each subject for entrance to the College (pp. 94-95).

I have, in several successive annual reports, called attention to the steady increase in number of students from year to year. Year before last, there were 403 students; last year 465; this year there have been 477; next year, as is evident from the number of candidates that have already presented themselves, the attendance will be still larger. Under the circumstances, I hope I shall not be regarded as too insistent when I say that the historic past of the old College demands, its present and constantly growing necessities require, that an appropriate and adequate College Hall should now replace the wholly insufficient and undignified building, which has lost much of its utility and was never worthy of its surroundings or of its name.

Respectfully,

J. H. VAN AMRINGE,

*Dean.*

June 27, 1901.

\* Ages of Freshmen during these years are recorded in but a small percentage of cases, in number too small to be valuable for statistical purposes.

## SCHOOL OF LAW

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### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1901

*To the President of Columbia University  
in the City of New York :*

SIR :

As Dean of the School of Law, I have the honor to submit the following report for the Academic year ending June 30, 1901.

I would respectfully renew the recommendation made by me in my last report that the number of scholarships open to members of the first-year, or entering class, be increased. Only four such scholarships are now offered. The experience of the present year confirms the opinion expressed by me in my last report: "This number is too limited to warrant any earnest effort to call the attention of college graduates to the tender made by the University to intending law students. I am constrained to think that this is a mistaken policy, and I hope that the Trustees may be able during the coming year to authorize an increase of at least six Faculty Scholarships, making a total of ten Faculty Scholarships open to members of the several classes."

The vacancy caused by the regrettable retirement of Professor Houston has been filled by the appointment of Professor Henry S. Redfield, of the Cornell University Law School.

The following table gives the subjects in which candidates for the degree of Bachelor of Laws were examined at the close of the year, the names of the instructors, the number

of lectures given per week in each subject, and the number of students examined therein :

| Instructors                | Courses                                       | Hours<br>per<br>Week | Number<br>of<br>Students |
|----------------------------|---|----------------------|--------------------------|
| <i>First Year</i>          |   |                      |                          |
| Mr. Stone.....             | Common Law Pleading<br>and Procedure.....     | 2*                   | 156                      |
| Mr. Terry.....             | Contracts.....                                | 4                    | 149                      |
| Mr. Stone.....             | Criminal Law and Pro-<br>cedure.....          | 2                    | 153                      |
| Prof. Keener....           | { Elements of Jurispru-<br>dence.....         |                      | 150                      |
|                            | { Equity.....                                 | 2                    | 152                      |
| Prof. Kirchwey..           | Real and Personal Prop-<br>erty.....          | 2                    | 152                      |
| Prof. Burdick...           | Torts.....                                    | 2                    | 151                      |
| Prof. Houston..            | Domestic Relations and<br>Law of Persons..... | 2*                   | 147                      |
| <i>Second Year</i>         |   |                      |                          |
| Prof. Canfield...          | Agency.....                                   | 2                    | 132                      |
| Prof. Houston..            | Bailments'.....                               | 2                    | 134                      |
| Prof. Burgess...           | Comparative and Consti-<br>tutional Law.....  | 3†                   | 2                        |
| Prof. Kirchwey..           | Quasi-Contracts.....                          | 2                    | 136                      |
| Prof. Keener....           | Equity.....                                   | 2                    | 138                      |
| Mr. Stone.....             | Equity Pleading and Pro-<br>cedure.....       | 2‡                   | 6                        |
| Mr. Stone.....             | Insurance.....                                | 2‡                   | 7                        |
| Prof. Burdick...           | Negotiable Paper.....                         | 2                    | 134                      |
| Prof. Kirchwey..           | Real and Personal Prop-<br>erty.....          | 2                    | 136                      |
| Prof. Burdick...           | Sales of Personal Prop-<br>erty.....          | 2                    | 136                      |
| Prof. Goodnow..            | Administrative Law.....                       | 2                    | 3                        |
| Prof. Munroe<br>Smith..... | Institutes of Roman Law                       | 2                    | 2                        |
| <i>Third Year</i>          |   |                      |                          |
| Mr. Stone.....             | Code Pleading and Prac-<br>tice.....          | 2                    | 14                       |
| Prof. Houston ..           | Bankruptcy.....                               | 2‡                   | 14                       |

\* For half the year.

† The record of the School of Political Science will show the number of law students taking this course as an optional or for degrees other than the degree of LL.B.

‡ For half the year. These courses are taken largely as optionals.

| Instructors                    | Courses                                    | Hours<br>per<br>Week | Number<br>of<br>Students |
|--------------------------------|--|----------------------|--------------------------|
| Prof. Canfield...              | Doctrines Peculiar to<br>New York Law..... | 2½                   | 7                        |
| Prof. Keener...                | Equity.....                                | 2                    | 93                       |
| Prof. Canfield...              | Evidence.....                              | 2                    | 91                       |
| Prof. Moore ....               | International Law.....                     | 2                    | 3                        |
| Prof. Burdick...               | Partnership.....                           | 2                    | 92                       |
| Prof. Keener...                | Corporations.....                          | 2                    | 94                       |
| Prof. Kirchwey..               | Real and Personal Prop-<br>erty.....       | 2                    | 86                       |
| Prof. Houston...               | Office Practice.....                       | 2½                   | 11                       |
| Prof. Burdick<br>and Kirchwey. | Suretyship and Mortgage                    | 2                    | 84                       |
| Prof. Houston ..               | Wills and Administration                   | 2                    | 81                       |
| Prof. Munroe<br>Smith.....     | Conflict of Private Law..                  | 1                    | 3                        |

During the current academic year four hundred and twenty-three students were registered in the School of Law, exclusive of students registered primarily under other faculties, divided into classes or groups as follows:

|                  |     |
|------------------|-----|
| Third Year.....  | 100 |
| Second Year..... | 148 |
| First Year.....  | 173 |
| Specials.....    | 2   |
| Total.....       | 423 |

The following is the result of the examination of candidates for a degree held at the close of the year:

Of the ninety-four members of the third-year class who presented themselves for examination, eight failed in one or more subjects, and therefore failed to receive the degree.

Annexed hereto will be found tables showing the percentage of college graduates in each class and in the School as a whole, and the parentage of college degrees.

Respectfully submitted,

WILLIAM A. KEENER,

*Dean.*

On page 16 will be found a table giving the percentage of the degrees held by students of the school; the distribution by classes is as follows:

[illegible]



## SCHOOL OF MEDICINE

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### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1901

*To the President of Columbia University  
in the City of New York:*

SIR:

The work in the College of Physicians and Surgeons during the past year has proceeded along the usual lines. With our large classes and the constantly increasing number of themes embraced in our curriculum, the energies of the instructing force have been drawn upon to their full limit, while several noteworthy lines of research have been pursued in Physiology and Pathology by members of the staff and other workers. Among these I would mention: the history of the discovery of the nerves and of their function; the action of alcohol on muscle; a new method of starving malignant growths; the cause of muscle fatigue; and resuscitation after death from chloroform.

The College has been well represented at various scientific meetings during the year, and several papers were presented by members of the Faculty.

The facilities for clinical teaching and bedside instruction at the Roosevelt Hospital have been of the greatest service to our Fourth-year students; and the morning lessons in Surgery given by Drs. Brewer and Blake have proved one of the most popular features of the course. It is proposed by Dr. James during the coming year to adopt the same method of teaching Practical Medicine in the wards of the Hospital.

There has been little change in the method of instruction in Obstetrics during the past year. The plan of recitations from a text-book for Second-year students, lectures for Third-

year students—didactic and clinical—and two weeks' residence at the Sloane Hospital, with bedside and operating-room instruction for Fourth-year students, has given more and more satisfaction as time has passed.

At the Sloane Maternity Hospital there were 1232 births during the year, which afforded an abundant field for clinical instruction. The Hospital has now so firmly established for itself a reputation all over the country as a school where modern midwifery can be studied to the best advantage, that applications are constantly received from physicians who desire to take private courses; up to the present time there have been 11,374 children born within its walls. As a training school for nurses the advantages it offers are so highly appreciated that we are receiving not only the nurses of the Roosevelt, St. Luke's, Presbyterian, and Mt. Sinai Hospitals for training, but during the year have made an arrangement with the Massachusetts General Hospital for the training of their nurses. When the distance of Boston from New York is considered, and the expense of the journey, it speaks well for the value placed on our training by this institution.

At the Vanderbilt Clinic, 156,958 patients received treatment during the year, furnishing abundant material for section-teaching in the diagnosis and treatment of a class of diseases and functional disorders such as are not seen in the wards of a hospital, and which constitute the greater part of a physician's work, especially in the earlier years of his practice.

As an evidence of the improved methods of teaching and the higher character of the work done by the students, it is worthy of mention that not a single member of the Third-year class who appeared for examination in Gynecology was either conditioned or rejected. This has never happened before in the history of this department.

An important contribution to the instructing facilities of the College, in the form of a large collection of pathological specimens, has been made by the Governors of the New York Hospital, and a valuable series of lantern slides for demonstration purposes in Pathology were presented to the College

by Dr. Delafield. With this year Dr. Delafield, who has been connected with the College since 1868, terminates his teaching service as Professor of Practical Medicine. It was with great regret that the Faculty accepted the resignation of one who has added so much to the reputation of the School. Our students, however, will not lose altogether his valuable teaching, as he has consented to hold a clinic each week at the Vanderbilt Clinic.

Respectfully,

JAMES W. McLANE, M.D.,  
*Dean.*

SCHOOL OF MINES  
SCHOOL OF CHEMISTRY  
SCHOOL OF ENGINEERING  
SCHOOL OF ARCHITECTURE

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REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1901

*To the President of Columbia University  
in the City of New York :*

SIR :

I have the honor to present the following report of the thirty-seventh annual session of the Schools under the Faculty of Applied Science, just closed.

During the year, five hundred and sixty-six students have been in attendance on the exercises of the Schools under this Faculty, distributed as follows :

*Undergraduate Courses*

|                   |     |
|-------------------|-----|
| Fourth Class..... | 100 |
| Third Class.....  | 124 |
| Second Class..... | 134 |
| First Class.....  | 155 |
|                   | 513 |

*University Courses*

|   |     |
|---|-----|
| For the Degree of Master of Arts.....       | 3   |
| For the Degree of Doctor of Philosophy..... | 2   |
|   | 5   |
| Carried forward.....                        | 518 |

|   |     |
|---|-----|
| Brought forward.....                                  | 518 |
| <i>Elective Courses</i>                               |     |
| Specials.....   | 48  |
| Grand total.....                                      | 566 |
| Students primarily registered under this Faculty, 566 |     |

The regular undergraduate students have pursued the different courses in the Schools under the Faculty of Applied Science, as follows :

|                          | First<br>Class. | Second<br>Class. | Third<br>Class. | Fourth<br>Class. | Total.    |
|--------------------------|-----------------|------------------|-----------------|------------------|-----------|
| SCHOOL OF MINES :        |                 |                  |                 |                  |           |
| Mining Engineering....   | 34              | 34               | 30              | 18               | 116       |
| Metallurgy.....          | 3               | 2                | 1               | 1                | 7         |
| SCHOOL OF CHEMISTRY....  | 8               | 16               | 7               | 9                | 40        |
| SCHOOL OF ENGINEERING :  |                 |                  |                 |                  |           |
| Civil Engineering.....   | 23              | 24               | 16              | 18               | 81        |
| Electrical Engineering.. | 36              | 23               | 28              | 23               | 110       |
| Mechanical Engineering   | 33              | 25               | 25              | 18               | 101       |
| SCHOOL OF ARCHITECTURE   | 18              | 10               | 17              | 13               | 58        |
|                          | <hr/> 155       | <hr/> 134        | <hr/> 124       | <hr/> 100        | <hr/> 513 |

Of the above-mentioned students, the following number received scholarships :

|                   |          |
|-------------------|----------|
| First Class.....  | 9        |
| Second Class..... | 14       |
| Third Class.....  | 8        |
| Fourth Class..... | 16       |
|                   | <hr/> 47 |

The following table shows the number of students who have attended the School of Mines and associated Schools since their foundation :

|            | M. E. | Met. | Geol. | Chem. | C. E. | S. E. | E. E. | Mech. E. | Arch. | Special. | Not stated. | Graduate. | Total. | Studied in<br>Two Courses.* | Actual No.<br>of Students. |
|------------|-------|------|-------|-------|-------|-------|-------|----------|-------|----------|-------------|-----------|--------|-----------------------------|----------------------------|
| 1864-5...  | ...   | ...  | ...   | ...   | ...   | ...   | ...   | ...      | ...   | ...      | ...         | ...       | 47     | ...                         | 47                         |
| 1865-6...  | 30    | ...  | ...   | ...   | ...   | ...   | ...   | ...      | ...   | 45       | 23          | ...       | 98     | ...                         | 98                         |
| 1866-7...  | 41    | ...  | 1     | 1     | ...   | ...   | ...   | ...      | ...   | 53       | 27          | ...       | 123    | ...                         | 123                        |
| 1867-8...  | 39    | ...  | 1     | 2     | ...   | ...   | ...   | ...      | ...   | 43       | 23          | ...       | 108    | ...                         | 108                        |
| 1868-9...  | 26    | ...  | 1     | 3     | ...   | ...   | ...   | ...      | ...   | 25       | 33          | ...       | 88     | 1                           | 87                         |
| 1869-70... | 22    | ...  | ...   | 5     | 1     | ...   | ...   | ...      | ...   | 25       | 24          | ...       | 77     | 2                           | 75                         |
| 1870-1...  | 17    | ...  | ...   | 8     | 1     | ...   | ...   | ...      | ...   | 44       | 31          | ...       | 101    | 4                           | 97                         |
| 1871-2...  | 22    | ...  | 1     | 5     | 2     | ...   | ...   | ...      | ...   | 62       | 29          | ...       | 121    | 3                           | 118                        |
| 1872-3...  | 33    | 1    | 1     | 7     | 10    | ...   | ...   | ...      | ...   | 38       | 47          | ...       | 137    | 4                           | 133                        |
| 1873-4...  | 69    | 6    | 1     | 12    | 34    | ...   | ...   | ...      | ...   | 25       | 46          | ...       | 193    | 28                          | 165                        |
| 1874-5...  | 81    | 2    | 1     | 16    | 60    | ...   | ...   | ...      | ...   | 22       | 62          | ...       | 244    | 44                          | 200                        |
| 1875-6...  | 91    | ...  | 1     | 25    | 69    | ...   | ...   | ...      | ...   | 28       | 61          | ...       | 275    | 49                          | 226                        |
| 1876-7...  | 94    | ...  | 2     | 24    | 51    | ...   | ...   | ...      | ...   | 20       | 69          | ...       | 260    | 30                          | 230                        |
| 1877-8...  | 92    | 1    | 5     | 42    | 55    | ...   | ...   | ...      | ...   | 18       | 71          | 7         | 291    | 45                          | 246                        |
| 1878-9...  | 79    | ...  | 1     | 53    | 58    | ...   | ...   | ...      | ...   | 26       | 75          | 16        | 308    | 44                          | 264                        |
| 1879-80... | 67    | ...  | ...   | 66    | 26    | ...   | ...   | ...      | ...   | 40       | 78          | 11        | 288    | ...                         | 288                        |
| 1880-1...  | 84    | ...  | ...   | 51    | 24    | ...   | ...   | ...      | ...   | 87       | 16          | ...       | 262    | ...                         | 262                        |
| 1881-2...  | 111   | ...  | ...   | 35    | 28    | ...   | ...   | ...      | 2     | 95       | 3           | ...       | 274    | ...                         | 274                        |
| 1882-3...  | 114   | ...  | 1     | 34    | 27    | ...   | ...   | ...      | 11    | 80       | 8           | ...       | 276    | ...                         | 276                        |
| 1883-4...  | 155   | ...  | 3     | 52    | 52    | ...   | ...   | ...      | 27    | ...      | 1           | ...       | 290    | ...                         | 290                        |
| 1884-5...  | 115   | 3    | 2     | 50    | 61    | ...   | ...   | ...      | 35    | ...      | 3           | ...       | 269    | ...                         | 269                        |
| 1885-6...  | 84    | 4    | ...   | 50    | 71    | ...   | ...   | ...      | 29    | ...      | 2           | ...       | 240    | ...                         | 240                        |
| 1886-7...  | 67    | 6    | 3     | 56    | 89    | 2     | ...   | ...      | 45    | ...      | 19          | ...       | 287    | ...                         | 287                        |
| 1887-8...  | 42    | 8    | 2     | 37    | 91    | 2     | ...   | ...      | 53    | ...      | 8           | ...       | 243    | ...                         | 243                        |
| 1888-9...  | 41    | 8    | 2     | 35    | 82    | ...   | ...   | ...      | 63    | 5        | 7           | ...       | 243    | ...                         | 243                        |
| 1889-90... | 38    | 7    | 2     | 34    | 78    | 1     | 19    | ...      | 76    | ...      | 5           | ...       | 260    | ...                         | 260                        |
| 1890-1...  | 40    | 7    | 3     | 35    | 86    | 1     | 14    | ...      | 70    | 12       | 9           | ...       | 277    | ...                         | 277                        |
| 1891-2...  | 53    | 5    | 3     | 26    | 102   | 1     | 9     | ...      | 72    | 33       | 21          | ...       | 325    | ...                         | 325                        |
| 1892-3...  | 49    | 4    | 2     | 22    | 82    | 1     | 64    | ...      | 82    | 24       | 7           | ...       | 337    | ...                         | 337                        |
| 1893-4...  | 52    | 4    | 1     | 27    | 80    | ...   | 96    | ...      | 75    | 38       | 7           | ...       | 380    | ...                         | 380                        |
| 1894-5...  | 60    | 5    | ...   | 22    | 84    | ...   | 116   | ...      | 74    | 27       | 11          | ...       | 399    | ...                         | 399                        |
| 1895-6...  | 49    | 5    | ...   | 22    | 67    | ...   | 121   | ...      | 77    | 29       | 5           | ...       | 375    | 1                           | 374                        |
| 1896-7...  | 48    | 4    | ...   | 28    | 72    | ...   | 137   | ...      | 82    | 22       | 6           | ...       | 399    | 2                           | 397                        |
| 1897-8...  | 57    | 3    | ...   | 35    | 75    | ...   | 141   | 14       | 76    | 18       | 13          | ...       | 432    | 2                           | 430                        |
| 1898-9...  | 67    | 1    | ...   | 34    | 61    | ...   | 135   | 38       | 77    | 38       | 16          | ...       | 467    | 8                           | 459                        |
| 1899-1900  | 90    | 2    | ...   | 34    | 68    | ...   | 116   | 67       | 60    | 50       | 4           | ...       | 490    | ...                         | 491                        |
| 1900-1901  | 116   | 7    | ...   | 40    | 81    | ...   | 110   | 101      | 58    | 48       | 5           | ...       | 566    | ...                         | 566                        |

\* Formerly the first year was the same for all courses, and students were not required to elect their course of study till the following year.

The table exhibits continued increase in the total number of students. The number this year is the largest since the foundation of the School of Mines. The courses in Mining and Electrical Engineering are, as usual, the leading courses in point of numbers. The new course in Mechanical

Engineering, which began two years ago with a class of fourteen, shows a healthy growth, as does the course in Civil Engineering.

The following table shows the degrees granted to members of the Schools :

*Undergraduate Courses*

*School of Mines :*

Engineer of Mines ..... 14

*School of Chemistry :*

Bachelor of Science..... 8

*School of Engineering :*

Civil Engineer..... 16

Electrical Engineer..... 19

Mechanical Engineer..... 13

*School of Architecture :*

Bachelor of Science..... 10

— 80

*University Courses*

Master of Arts \*..... 2

Doctor of Philosophy..... 1

— 3

83

The above includes the following degrees, which were granted during the year to candidates who failed to comply with all the requirements at last Commencement :

Engineer of Mines..... 2

Electrical Engineer..... 3

Bachelor of Science (in Architecture)..... 2

Civil Engineer..... 2

— 9

The following table shows the number of graduates in the different courses of study since the foundation of the School of Mines :

\* One received also the degree of Engineer of Mines.

|        | M. E. | Ph. B. or<br>Met. Eng. | Ph. B. (Geol.) | Ph. B. or B. S.<br>(Chemistry) | C. E. | S. E. | E. E. | Mech. E. | Ph. B. or B. S.<br>(Architecture) | A. M. | Ph. D. | Degrees Taken | Took more than<br>one Degree | Graduates |
|--------|-------|------------------------|----------------|--------------------------------|-------|-------|-------|----------|-----------------------------------|-------|--------|---------------|------------------------------|-----------|
| 1867.. | 1     |                        |                |                                |       |       |       |          |                                   |       |        | 1             |                              | 1         |
| 1868.. | 14    |                        |                |                                |       |       |       |          |                                   |       |        | 14            |                              | 14        |
| 1869.. | 21    |                        |                |                                |       |       |       |          |                                   |       |        | 21            |                              | 21        |
| 1870.. | 9     |                        |                |                                |       |       |       |          |                                   |       | 1      | 10            |                              | 10        |
| 1871.. | 8     |                        |                | 1                              |       |       |       |          |                                   |       |        | 9             |                              | 9         |
| 1872.. | 8     |                        |                |                                |       |       |       |          |                                   |       |        | 8             |                              | 8         |
| 1873.. | 6     | 1                      |                | 2                              |       |       |       |          |                                   |       |        | 9             | 2                            | 7         |
| 1874.. | 7     |                        |                |                                | 1     |       |       |          |                                   |       |        | 8             |                              | 8         |
| 1875.. | 10    | 1                      | 1              | 5                              |       | 5     |       |          | 1                                 |       | 1      | 23            | 4                            | 19        |
| 1876.. | 15    |                        |                | 3                              | 16    |       |       |          | 3                                 |       | 3      | 37            | 13                           | 24        |
| 1877.. | 29    |                        |                |                                | 27    |       |       |          | 6                                 |       | 6      | 62            | 26                           | 36        |
| 1878.. | 26    |                        | 2              | 10                             | 6     |       |       |          | 2                                 |       | 2      | 46            | 7                            | 39        |
| 1879.. | 20    |                        | 1              | 5                              | 8     |       |       |          | 3                                 |       | 3      | 37            | 3                            | 34        |
| 1880.. | 15    |                        |                | 11                             | 9     |       |       |          | 9                                 |       | 9      | 44            | 10                           | 34        |
| 1881.. | 14    |                        |                | 22                             | 8     |       |       |          | 2                                 |       | 2      | 46            | 3                            | 43        |
| 1882.. | 23    |                        |                | 12                             | 5     |       |       |          | 4                                 |       | 4      | 44            | 7                            | 37        |
| 1883.. | 22    |                        |                | 5                              | 7     |       |       |          | 4                                 |       | 4      | 38            | 5                            | 33        |
| 1884.. | 37    |                        |                | 9                              | 15    |       |       | 5        | 5                                 |       | 5      | 71            | 10                           | 61        |
| 1885.. | 37    |                        | 1              | 3                              | 4     |       |       | 3        | 3                                 |       | 1      | 49            | 2                            | 47        |
| 1886.. | 16    |                        |                | 4                              | 9     |       |       | 5        | 5                                 |       | 2      | 36            | 3                            | 33        |
| 1887.. | 22    | 2                      |                | 11                             | 13    |       |       | 4        | 4                                 |       | 2      | 54            | 3                            | 51        |
| 1888.. | 5     | 2                      |                | 15                             | 14    |       |       | 8        | 8                                 |       | 1      | 45            | 3                            | 42        |
| 1889.. | 14    |                        | 1              | 6                              | 19    | 2     |       | 11       | 11                                |       | 2      | 55            | 4                            | 51        |
| 1890.. | 6     | 6                      |                | 6                              | 17    |       |       | 17       | 17                                |       | 6      | 58            | 4                            | 54        |
| 1891.. | 5     |                        |                | 3                              | 12    |       | 5     | 11       | 3                                 | 1     | 1      | 40            | 5                            | 35        |
| 1892.. | 9     |                        | 1              | 6                              | 18    |       | 7     | 5        | 9                                 |       | 55     | 10            | 45                           |           |
| 1893.. | 8     |                        | 1              | 2                              | 13    |       | 3     | 13       | 3                                 | 2     | 45     | 3             | 42                           |           |
| 1894.. | 6     |                        | 1              | 5                              | 17    |       | 13    | 15       | 1                                 | 6     | 63     | 6             | 57                           |           |
| 1895.. | 13    | 1                      |                | 4                              | 22    |       | 12    | 16       |                                   | 7     | 76     |               | 76                           |           |
| 1896.. | 12    | 1                      |                | 4                              | 9     |       | 15    | 17       | 2                                 |       | 60     | 2             | 58                           |           |
| 1897.. | 6     |                        |                | 3                              | 15    |       | 26    | 9        | 4                                 |       | 63     | 2             | 61                           |           |
| 1898.. | 19    | 2                      |                | 5                              | 20    |       | 23    | 15       | 6                                 |       | 90     |               | 90                           |           |
| 1899.. | 9     | 1                      |                | 6                              | 13    |       | 24    | 14       | 8                                 |       | 75     | 4             | 71                           |           |
| 1900.. | 11    |                        |                | 4                              | 5     |       | 25    | 16       | 3                                 |       | 64     | 1             | 63                           |           |
| 1901.. | 14    |                        |                | 8                              | 16    |       | 19    | 13       | 10                                | 2     | 1      | 83            |                              | 83        |
|        |       |                        |                |                                |       |       |       |          |                                   |       |        |               |                              |           |
|        | 497   | 17                     | 9              | 180                            | 343   | 2     | 172   | 13       | 194                               | 41    | 71     | 1539          | 142                          | 1397      |

Graduates of other institutions to the number of 90 have been in attendance at the Schools of Applied Science during the past year. A list of the institutions from which they graduated and the degrees which they have received will be found in the report of the Registrar, pages 251 to 255.

During the year three hundred and seventy-one students



applied for admission to the Schools under this Faculty, as follows:

|  |     |
|--|-----|
| Admitted on full or final examination..... | 165 |
| Admitted by certificate or diploma*.....   | 73  |
| Refused admittance.....                    | 36  |
| Took preliminary examination only.....     | 72  |

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The table on pp. 112 and 113 shows the number and percentage of candidates passing in each subject for entrance to the Schools of Applied Science at the entrance examinations in June for the past four years.

In 1900-01, one hundred and ninety-three men were admitted as regular students, as follows:

|                   |     |
|-------------------|-----|
| First Class.....  | 155 |
| Second Class..... | 27  |
| Third Class.....  | 7   |
| Fourth Class..... | 4   |

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193

Admitted as special students in

|                             |    |
|-----------------------------|----|
| Mining Engineering.....     | 11 |
| Civil Engineering.....      | 2  |
| Metallurgy.....             | 1  |
| Mechanical Engineering..... | 3  |
| Architecture.....           | 7  |
| Chemistry.....              | 10 |

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34

Admitted as graduate students for

|                           |   |
|---------------------------|---|
| Master of Arts.....       | 2 |
| Doctor of Philosophy..... | 2 |

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|                                  |     |
|----------------------------------|-----|
| Total new students.....          | 231 |
| Admitted, but did not enter..... | 7   |

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Total admitted..... 238

The students entering the regular courses were admitted as follows:

|   |     |
|---|-----|
| Admitted without conditions.....        | 45  |
| Conditioned in one or two subjects..... | 71  |
| “ “ more than two subjects.....         | 122 |

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238

\* Does not include the whole number so admitted, as the reports from the examining officers do not give this information in all cases. Candidates presenting regents' diplomas and certificates are included among those "admitted on examination."

The following table showing the number of students who received practical instruction in the different laboratories of the Department of Chemistry is of interest:

|  |     |
|--|-----|
| General Chemistry ; Columbia College.....    | 59  |
| General Chemistry ; School of Medicine ..... | 149 |
| <hr/>  |     |
| General Chemistry Total.....                 | 208 |
| Qualitative Analysis.....                    | 179 |
| Quantitative Analysis.....                   | 139 |
| Organic Chemistry.....                       | 22  |
| Industrial Chemistry.....                    | 36  |
| Assaying.....                                | 53  |
| Physical Chemistry.....                      | 46  |
| <hr/>  |     |
| Total.....                                   | 683 |

The more important legislation by the Faculty during the year may be summarized as follows:

1. The unification of the entrance-examination requirements with those of the institutions represented in the association of the College Entrance Examination Board of the Middle States and Maryland.

2. The revision of the by-laws of the Faculty to give each officer of instruction a more direct control of his own students in the matter of attendance in class-room exercises.

3. A committee of heads of departments has been giving extended consideration to the question of equalizing the exactions in the various courses, so as to bring the requirements of every course within the time limit which may properly be expected as to class-room work and preparation outside of the class room.

Respectfully submitted,

F. R. HUTTON,

*Dean.*

| Number of candidates for admission..... | June, 1898<br>187          |             |            | June, 1899<br>204          |             |            | June, 1900<br>222          |             |            | June, 1901<br>239          |             |            |
|---|----------------------------|-------------|------------|----------------------------|-------------|------------|----------------------------|-------------|------------|----------------------------|-------------|------------|
|   | No. taking<br>examinations | No. passing | Percentage | No. taking<br>examinations | No. passing | Percentage | No. taking<br>examinations | No. passing | Percentage | No. taking<br>examinations | No. passing | Percentage |
| <i>English</i>                          |                            |             |            |                            |             |            |                            |             |            |                            |             |            |
| Reading and Composition.....            | 138                        | 85          | 62         | 127                        | 82          | 65         | 154                        | 91          | 59         | 148                        | 87          | 58         |
| Study and Composition.....              | 101                        | 67          | 66         | 84                         | 64          | 76         | 119                        | 76          | 64         | 129                        | 57          | 44         |
| <i>Mathematics—Elementary</i>           |                            |             |            |                            |             |            |                            |             |            |                            |             |            |
| Algebra to Quadratics.....              | 127                        | 90          | 70         | 140                        | 105         | 75         | 153                        | 113         | 74         | 151                        | 130         | 80         |
| Plane Geometry.....                     | 118                        | 91          | 77         | 135                        | 98          | 73         | 146                        | 115         | 79         | 146                        | 102         | 70         |
| Quadratics.....                         |                            |             |            |                            |             |            | 127                        | 99          | 78         | 142                        | 119         | 83         |
| <i>Advanced</i>                         |                            |             |            |                            |             |            |                            |             |            |                            |             |            |
| Algebra.....                            | 101                        | 68          | 67         | 85                         | 69          | 81         | 117                        | 59          | 50         | 114                        | 58          | 50         |
| Solid Geometry.....                     | 101                        | 64          | 63         | 87                         | 57          | 66         | 122                        | 84          | 69         | 112                        | 78          | 70         |
| Plane Trigonometry.....                 | 99                         | 53          | 54         | 85                         | 47          | 55         | 117                        | 63          | 54         | 111                        | 60          | 54         |
| <i>History</i>                          |                            |             |            |                            |             |            |                            |             |            |                            |             |            |
| Greek History.....                      |                            |             |            |                            |             |            | 0                          | 0           | 0          | 9                          | 8           | 88         |
| Roman History.....                      |                            |             |            |                            |             |            | 0                          | 0           | 0          | 10                         | 8           | 80         |
| English History.....                    |                            |             |            |                            |             |            | 0                          | 0           | 0          | 20                         | 13          | 65         |
| American History.....                   | 110                        | 62          | 56         | 130                        | 83          | 64         | 144                        | 122         | 85         | 112                        | 82          | 73         |



# SCHOOL OF POLITICAL SCIENCE

## REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1901

*To the President of Columbia University  
in the City of New York :*

SIR :

I have the honor to submit the following report of the work of the Faculty of Political Science for the scholastic year 1900-1901. During the year 268 students have taken courses of instruction under the Faculty of Political Science, of whom 18 were women. Of these 68 students were also registered in the Law School, and 13 in the Schools of Philosophy, Pure Science, and Applied Science.

In the Report of the Registrar will be found tabular statements of the courses of study offered in the School, together with the attendance upon each, as follows :

### *Group I—History and Political Philosophy*

- A. European History .....pages 270-271
- B. American History .....pages 270-271
- C. Political Philosophy.....pages 270-271

### *Group II—Public Law and Comparative Jurisprudence*

- A. Constitutional Law .....page 291
- B. International Law.....page 291
- C. Administrative Law.....page 291
- D. Roman Law and Comparative Jurisprudence.....page 291

### *Group III—Economics and Social Science*

- A. Political Economy and Finance....page 264
- B. Sociology and Statistics.....page 264

## WORK IN THE SEMINARS

*Seminar in European History*

Professor Robinson. 2 hours fortnightly. 6 members.

The topic treated was the Development of the Papal Primacy to Gregory VII. Each student gave two or more reports on the various phases of the subject, dealing chiefly with the sources.

*Seminar in American Colonial History*

Professor Osgood. 2 hours a week. 27 members.

This course has been conducted as a lecture course and seminar combined. A paper was presented by each of the students and was discussed in the seminar. Among the subjects treated in these papers were :

- Royal Charters and Governors' Commissions ;
- Royal Instructions to Governors ;
- Salaries of Governors ;
- Agrarian Riots in New Jersey from 1745 to 1790 ;
- Pirates and Piracy ;
- Paper Money in the Colonies ;
- Career of Robert Livingston ;
- Relations between the Executive in New York and the English Government ;
- Policy of the British Government toward the Charter Colonies subsequent to 1690.

A number of papers, also, were presented on subjects connected with Colonial defence.

*Seminar in American History*

Professor Osgood. 1 hour a week. 6 members.

In connection with the work of this Seminar the following Master's theses have been prepared, read, and discussed :

- System of Defence in Early Colonial Massachusetts ..... Sidney D. Brummer.
- The Administration of George Clark in New York, 1736 to 1743..... Walter H. Nichols.
- The Relation of the Iroquois to the Struggle between the French and English in North America ..... Walter D. Gerken.

Relations between France and England in

North America from 1690 to 1713..... Samuel E. Moffett.

France and England in America from 1713

to 1748 ..... Henry R. Spencer.

Conflict between the French and English in

North America ..... Walter L. Fleming.

*Seminar in Modern European History*

Professor Sloane. 6 members.

The following are the subjects which were discussed and upon which papers have been presented :

The Treaty of Basel ..... Guy S. Ford.

Hanover in the Revolutionary Epoch..... Guy S. Ford.

The 18th Brumaire ..... Charles W. Spencer.

Beginnings of Administration under the

Consulate..... Charles W. Spencer.

Origins of the Continental System..... Ulrich B. Phillips.

Development of the Continental System... Ulrich B. Phillips.

Napoleon and the Caulaincourt Correspond-

ence..... Ellen S. Davison.

Caulaincourt in Russia..... Ellen S. Davison.

Custine in Metz..... Walter P. Bordwell.

Hardenberg and Haugwitz..... Paul Abelson.

*Seminar in Political Philosophy*

Professor Dunning. 1 hour a week. 1 member.

William O. Easton presented an elaborate paper on the Political Theories of Spinoza with Reference to the Theory of Hobbes.

*Seminar in Constitutional Law*

Professor Burgess. 1 hour a week. 27 members.

The work in this Seminar during the present year has been the study of the cases decided by the Supreme Court of the United States involving private rights and immunities under the protection of the Constitution of the United States. Each member of the Seminar has prepared an essay upon the cases relating to a given point under this

general subject, and has read the same before the Seminar, where it has been subjected to general comment and criticism.

*Seminar in Diplomacy and International Law*

Professor Moore. 2 hours a week. 12 members.

Papers were read as follows:

|   |                     |
|---|---------------------|
| Decisions of the Courts in the United States<br>on Questions Growing out of the Annexa-<br>tion of Territory..... | William H. Adams.   |
| The Southwestern Boundary of the United<br>States.....  | James F. Barnett.   |
| The Development of the Laws of War.....   | Walter P. Bordwell. |
| Treaties: Their Making, Construction, and<br>Enforcement.....   | Samuel D. Crandall. |
| The Diplomacy of the Second Empire.....   | Stephen P. Duggan.  |
| Blockades .....   | Sydney H. Herman.   |
| Diplomatic Officers.....  | William C. B. Kemp. |

*Seminar in Political Economy*

Professor Mayo-Smith. 1 hour a week. 9 members.

In addition to reading and discussing Marshall's *Principles of Economics*, in which all the members of the Seminar participated, papers were read upon the following subjects:

|   |                    |
|---|--------------------|
| Trusts in the United States.....        | Hajime Hoshi.      |
| Trusts and Prices.....                  | Robert B. Olsen.   |
| The Industrial Employment of Women..... | Charles M. Niezer. |

*Seminar in Political Economy and Finance*

Professor Seligman. 2 hours fortnightly. 20 members.

The subject of work in this Seminar during the first term was "The Foundations of Economic Philosophy." During the second term a variety of subjects was discussed. Each member of the Seminar also made a report at each meeting on current periodical literature in economics, including the literature of the following countries: United States, England, France, Germany, Italy, Spain, and Japan. The papers read were as follows:



|  |                     |
|--|---------------------|
| Natural Law and Economics.....             | Robert P. Shepherd. |
| The Economic Motive.....                   | Holland Thompson.   |
| The Law of Competition.....                | Walter E. Clark.    |
| The Theory of Individualism.....           | Enoch M. Banks.     |
| Social Element in the Theory of Value..... | John W. Dickman.    |
| Theory of Insurance.....                   | Allan H. Willett.   |
| Theory of Monopolies.....                  | Alvin S. Johnson.   |
| Economic Doctrine of Senior.....           | Albert C. Whitaker. |
| Bounties and Shipping Subsidies.....       | Royal Meeker.       |
| Legal Decisions on the Labor Question..... | Ernest A. Cardozo.  |
| Commercial Policy of Japan.....            | Yetaro Kinoshita.   |
| Early American Economic Theory.....        | Albert Britt.       |
| The Movement toward Consolidation.....     | Robert B. Oken.     |

*Seminar in Economic Theory*

Professor Clark. 2 hours fortnightly. 12 members.

Papers were presented on the following subjects:

|  |                     |
|--|---------------------|
| Labor as a Measure of Value.....               | Albert C. Whitaker. |
| Value Theories of Say and Ricardo.....         | Robert P. Shepherd. |
| Rent and Value.....                            | Alvin S. Johnson.   |
| Monetary Theories.....                         | John W. Dickman.    |
| The Influence of Insurance on Distribution.... | Allan H. Willett.   |
| Early Socialism.....                           | Enoch M. Banks.     |
| Louis Blanc.....                               | Royal Meeker.       |
| Fabian Socialism.....                          | Albert Britt.       |
| Commercial Crises.....                         | Ernest A. Cardozo.  |
| Speculation.....                               | Yetaro Kinoshita.   |
| Labor Unions in North Carolina.....            | Holland Thompson.   |
| Welfare Institutions.....                      | Walter E. Clark.    |

*Statistical Laboratory and Seminar*

Professor Mayo-Smith. 2 hours fortnightly. 5 members.

The work of the year was devoted to developing the mathematical theory of statistics with practical exercises.

*Seminar in Sociology*

Professor Giddings. 2 hours fortnightly. 12 members.

The following papers were read and discussed.

Types of Mind and Character in Colonial

Massachusetts..... Edward W. Capen.

|  |                       |
|--|-----------------------|
| Types of Mind and Character in Colonial Connecticut.....   | William F. Clark.     |
| Types of Mind and Character in Colonial New York.....  | George M. Fowles.     |
| Types of Mind and Character in Colonial Pennsylvania.....  | Andrew L. Horst.      |
| Types of Mind and Character in Colonial Virginia.....  | Robert L. Irving.     |
| Types of Mind and Character in the Early Days of North Carolina.....                                 | Thomas J. Jones.      |
| Types of Mind and Character in the Early Days of Kentucky.....                                       | Edwin A. McAlpin, Jr. |
| Types of Mind and Character in the Early Days of Indiana.....  | Daniel L. Peacock.    |
| Types of Mind and Character in the Early Days of Wisconsin.....                                      | Albert G. Mohr.       |
| An Analysis of the Mental Characteristics of the Population of an East-Side New York City Block..... | Thomas J. Jones.      |
| A Statistical Study of the Response to Lincoln's First Call for Volunteers.....                      | Andrew L. Horst.      |
| The Charities of Five Presbyterian Churches in Harlem.....   | Robert L. Irving.     |
| The Poor Laws of Connecticut.....  | Edward W. Capen.      |
| Parochial Settlement in England.....   | Bertha H. Putnam.     |
| A Critical and Statistical Study of Male and Female Birth Rates.....                                 | Daniel L. Peacock.    |

#### WORK OF FELLOWS

During the year the following persons have held Fellowships in subjects falling under the jurisdiction of this Faculty:

##### 1. William Maitland Abell . . . Political Science.

Yale University, A.B., 1887; A.M., 1898.

New York University, LL.M., 1894.

Columbia University, graduate student, 1898-1901; Fellow in Political Science, 1899-1900.

Mr. Abell, Honorary Fellow, continued his work in the Seminar in Constitutional Law, and made excellent progress in the preparation of his Doctor's dissertation.

2. **Walter Percy Bordwell** . . . International Law.  
 University of California, B.L., 1898.  
 Columbia University, graduate student, 1898-1901.  
 Mr. Bordwell, the holder of the Schiff Fellowship, worked under the direction of Professor Moore upon his Doctor's dissertation :  
 "The Development of the Laws of War since the Time of Grotius." He also took part in the Seminars of Professors Moore and Sloane, presenting a paper in each of these Seminars. He passed, in May, his oral examinations for the Doctor's degree.
3. **James Wilford Garner** . . . Political Science.  
 Mississippi Agricultural and Mechanical College, B.S., 1892.  
 University of Chicago, graduate student, 1896-99; Instructor in Bradley Polytechnic Institute, Peoria, Ill., 1899-1900.  
 Columbia University, graduate student, 1900-01.  
 Mr. Garner worked under the direction of Professor Dunning in American Political Philosophy. Professor Dunning reports that his "Study of the Tendencies Manifested in the Amendments of State Constitutions from 1830-1860" is a noteworthy contribution to science. He also attended the Seminar in Constitutional Law and worked there upon the cases decided by the Supreme Court in the interpretation of private rights under the Constitution of the United States.
4. **Alvin Saunders Johnson** . . . Economics.  
 University of Nebraska, A.B., 1897; A.M., 1898.  
 Columbia University, graduate student, 1899-1901; Scholar in Political Economy, 1899-1900.  
 Mr. Johnson read a paper in Professor Seligman's Seminar on "The Theory of Monopolies." He worked also in Professor Clark's Seminar, and, in consultation with Professor Clark, upon the preparation of his Doctor's dissertation, "The Classical Theory of Rent." He passed, in May, his oral examinations for the Doctor's degree.
5. **Thomas Jesse Jones** . . . Sociology.  
 Marietta College, A.B., 1897.  
 Student at Union Theological Seminary, 1897-1900.  
 Columbia University, A.M., 1899; graduate student, 1897-1901.  
 Mr. Jones worked under the direction of Professor Giddings upon his Doctor's dissertation, "A Sociological Study of the Population of a New York City Block." Professor Giddings reports that this dissertation promises to be one of the most minute investigations of modern city life yet undertaken. Mr. Jones also made the annual revision of the list and description of social settlements in New York City which is regularly expected of a Fellow in Sociology. He passed, in May, his oral examinations for the Doctor's degree.

## 6. Ulrich Bonnell Phillips . . . History.

University of Georgia, A.B., 1897; A.M., 1898. Tutor in History, 1899-1900.

Columbia University, graduate student, 1900-01.

Mr. Phillips worked under the direction of Professor Dunning upon a "Study of the Political History of Georgia," in connection with which he planned to make researches during the summer in the historical collections at Savannah, Atlanta, and other points in the State. Mr. Phillips also presented several papers on various phases of American Political Philosophy in connection with the course on that subject. He also worked in the Seminars of Professors Sloane and Robinson and presented reports in each.

## 7. Jesse Eliphalet Pope . . . Economics.

University of Minnesota, B.S., 1895; M.S., 1897.

Columbia University, graduate student, 1897-1901: Fellow in Economics, 1898-1900.

Mr. Pope, Honorary Fellow, worked in Seminar with Professor Seligman, but took a less active part than he desired, owing to his having obtained a professorship in Economics at New York University. He had, however, passed his oral examinations for the Doctor's degree in May, 1900, and was busy through the winter in preparing his Doctor's dissertation.

## 8. Charles Worthen Spencer . . American History.

Colby University, A.B., 1890.

Chicago University, Fellow in Political Science, 1892-94.

Columbia University, graduate student, 1894-95, 1900-01.

Colgate University, Professor of History, 1895-1900.

Mr. Spencer worked under the direction of Professor Osgood upon the preparation of his Doctor's dissertation, the subject of which is "New York as a Royal Province, 1690-1730." He also read two papers in Professor Sloane's Seminar, and participated generally in the work of this Seminar. He passed, in May, his oral examinations for the Doctor's degree.

## 9. Earl Evelyn Sperry . . European History.

Syracuse University, Ph.B., 1898; Ph.M., 1899.

Columbia University, Scholar in History, 1899-1900; graduate student, 1899-1901.

Mr. Sperry worked under the direction of Professor Robinson, and besides preparing several reports for the Seminar in European History, completed the first draft of his Doctor's dissertation upon "The Celibacy of the Clergy in the Mediæval Church." He also passed, in May, the oral examinations for the Doctor's degree.

## 10. Albert Concer Whitaker . . . Economics.

Stanford University, A.B., 1899.

Columbia University, Scholar in Economics, 1899-1900; graduate student, 1899-1901.

Mr. Whitaker worked in Seminar with Professor Seligman and also with Professor Clark. He made considerable progress in the preparation of his Doctor's dissertation upon "The Entrepreneur," and passed, in June, his oral examinations for the Doctor's degree.

## PUBLICATIONS UNDER THE SUPERVISION OF THE FACULTY

Of the Studies in History, Economics, and Public Law, under the editorial management of Professor Seligman, there have appeared during the year six numbers.

Vol. XIII. No. 1. The Legal Property Relations of Married Parties. By Professor Isidor Loeb.

No. 2. Political Nativism in New York State. By Louis Dow Scisco.

No. 3. Reconstruction of Georgia. By Edwin C. Woolley.

Vol. XIV. No. 1. Loyalism in New York during the American Revolution. By Prof. Alexander C. Flick.

No. 2. Economic Theory of Risk and Insurance. By Allan H. Willett.

Vol. XV. No. 1. Civilization and Crime. By Arthur Cleveland Hall.

The sale of these monographs and volumes has increased considerably during the past few years and some of the early volumes are now out of print. The foreign demand has also developed to such an extent that arrangements have now been made with agents, both in London and Paris, for placing them upon the European market.

The *Political Science Quarterly* has continued to prosper. With the close of the year 1900 it completed its fifteenth annual volume. In order to make available for students the great mass of scientific matter contained in these fifteen volumes, a general index has been prepared, to be published in a separate volume. This index will appear during the summer.

Political  
Science  
Quarterly

Two very successful public meetings of the Academy were held during the winter. The first was addressed by Professor Goodnow, who had served as a member of the Commission to Revise the Charter of New York City. Professor Goodnow presented a careful analysis of the report and recommendations of the Commission. The second meeting was devoted to a discussion of Trusts by Professor J. W. Jenks, who gave the chief results of the investigations made by him on behalf of the Industrial Commission.

The History Club has about thirty members, and, with invited guests, an average attendance of about fifty persons. During the year it has held eight meetings, of which three were conducted solely by the students. At the other meetings papers were read by James Ford Rhodes, Frederic Harrison, Professor Robinson, and Professor George B. Adams.

I reported in 1899 that a number of former students of the School of Political Science had obtained positions either as teachers or in the administrative service of New York State. I have the pleasure now to report that during the past two years a much larger number have obtained first appointments, or have been advanced to better positions, not only as teachers and as state officers, but also in the Federal Civil Service. The lists appended are probably incomplete, but they will serve to show the widening influence of the School. The dates immediately following each name indicate the period of residence in the School.

#### I.—EDUCATIONAL APPOINTMENTS

CARL L. BECKER, 1898-99,  
Univ. Fellow, 1898-99,  
ERNEST L. BOGART, 1897-98,  
LESTER G. BUGBEE, 1893-95,  
Univ. Fellow, 1893-95,  
WILLIAM M. BURKE, 1897-99,  
Univ. Fellow, 1897-99;  
Ph.D., 1899,

Instructor in Political Science and History, Pennsylvania State College.  
Associate Professor of Economics and Sociology, Oberlin College, Ohio.  
Adjunct Professor of History, University of Texas.  
Professor of History and Economics, Albion College, Michigan.

- CHARLES E. CHADSEY, 1893-94,  
Univ. Fellow, 1893-94;  
Ph.D., 1897,  
WALTER E. CLARK, 1899-1901,  
WALTER W. COOK, 1898-1900,  
A.M., 1899,  
HARRY A. CUSHING, 1893-95,  
Univ. Fellow, 1894-95;  
Ph.D., 1896,  
ELLEN S. DAVISON, 1899-1901,  
Cand. Ph.D.,  
ALFRED L. P. DENNIS, 1896-99,  
Ph.D., 1901,  
STEPHEN P. H. DUGGAN, 1896-1900,  
A.M., 1899; Cand. Ph.D.,  
CHARLES F. ÉMERICK, 1896-97,  
University Fellow, 1896-97;  
Ph.D., 1897,  
HENRY C. EMERY, 1893-94,  
University Fellow, 1893-94;  
Ph.D., 1896,  
JOHN A. FAIRLIE, 1897-98,  
University Fellow, 1897-98;  
Ph.D., 1898,  
GUY S. FORD, 1900-01,  
Cand. Ph.D.,  
DELMER E. HAWKINS, 1899-1900,  
ALLEN JOHNSON, 1897-98,  
University Fellow, 1897-98;  
Ph.D., 1899,  
ALVIN S. JOHNSON, 1898-1901,  
University Fellow, 1900-01;  
Cand. Ph.D.,  
LINDLEY M. KEASEY, 1888-90,  
Ph.D., 1890,  
JAMES A. MCLEAN, 1892-94,  
University Fellow, 1892-94;  
Ph.D., 1894,  
MILO R. MALTBIE, 1895-97,  
University Fellow, 1895-96;  
Ph.D., 1897,  
CHARLES E. MERRIAM, Jr., 1896-98,  
Fellow, 1897-98;  
Ph.D., 1900,  
WALTER H. NICHOLS, 1899-1901,  
Cand. Ph.D.,  
COMADORE E. PREVEY, 1898-1900,  
University Fellow, 1898-1900;  
A.M., 1899; Cand. Ph.D.,  
JESSE E. POPE, 1897-1900,  
University Fellow, 1898-1900;  
Cand. Ph.D.,  
Lecturer on History, University of  
Colorado.  
Tutor in Political Economy, College  
of the City of New York.  
Instructor in Constitutional and Ad-  
ministrative Law in the University  
of Nebraska.  
Lecturer on History and Constitu-  
tional Law, Columbia University.  
Lecturer on History, Barnard College.  
Assistant in History, 1900-01, Har-  
vard University; Instructor in  
History, Bowdoin College.  
Instructor in Political Science, College  
of the City of New York.  
Professor of Political Economy, Smith  
College, Mass.  
Professor of Political Economy, Yale  
University.  
Assistant Professor of Administrative  
Law, University of Michigan.  
Instructor of History, Yale University.  
Instructor in Political Economy, Syra-  
cuse University.  
Professor of History, Iowa College,  
Grinnell; also Lecturer on Euro-  
pean History in the University of  
Wisconsin, Summer Session, 1901.  
Assistant in Economics, Bryn Mawr  
College.  
Professor of Economics and Social  
Science, Bryn Mawr College.  
Professor of History and Political  
Science, University of Idaho.  
Lecturer on Municipal Government,  
Columbia University.  
Docent in Political Science, University  
of Chicago.  
Professor of History, University of  
Colorado.  
Lecturer on Sociology, University of  
Nebraska.  
Adjunct Professor of Political Econo-  
my, 1900-01, New York Univer-  
sity; Professor of Political Eco-  
nomy, University of Missouri.

- CHARLES L. RAPER, 1898-1900,  
University Fellow, 1899-1900;  
Cand. Ph.D.,  
Lecturer on History, Barnard College,  
1900-01; Assistant Professor of  
Economics and History, Univer-  
sity of North Carolina.
- WILLIAM A. RAWLES, 1898-99,  
Cand. Ph.D.,  
Assistant Professor of Economics and  
Sociology, University of Indiana.
- WILLIAM A. SCHAPER, 1896-98,  
University Fellow, 1897-98;  
Ph.D., 1901,  
Professor of Administration, Univer-  
sity of Minnesota.
- LOUIS D. SCISCO, 1899-1900,  
Ph.D., 1901,  
Teacher of History, High School, Still-  
water, Minnesota.
- WILLIAM R. SHEPHERD, 1893-95,  
University Fellow, 1893-95;  
Ph.D., 1896,  
Tutor in History, Columbia Univer-  
sity.
- JAMES T. SHOTWELL, 1898-1900,  
University Fellow, 1899-1900;  
Cand. Ph.D.,  
Assistant in History, Columbia Uni-  
versity.
- WILLIAM R. SMITH, 1898-1900,  
University Fellow, 1898-1900;  
Cand. Ph.D.,  
Instructor in History, University of  
Colorado.
- EDWIN P. TANNER, 1897-1900,  
A.M., 1898; University Fellow,  
1899-1900; Cand. Ph.D.,  
Teacher of History, High School,  
Stillwater, Minnesota.
- HOLLAND THOMPSON, 1899-1901,  
University Fellow, 1899-1900;  
A.M., 1900,  
Tutor in History, College of the City  
of New York.
- FRANCIS WALKER, 1892-94,  
University Fellow, 1892-94;  
Ph.D., 1895,  
Associate Professor of Political Econo-  
my, Adelbert College, Western  
Reserve University.
- ULYSSES G. WEATHERBY, 1899-1900,  
Professor of Economics and Social  
Science, University of Indiana.

## 2.—GOVERNMENTAL APPOINTMENTS

- FRANK G. BATES, 1896-97,  
Ph.D., 1899,  
State Librarian, Providence, R. I.
- JOHN F. CROWELL, 1894-95,  
University Fellow, 1894-95;  
Ph.D., 1897,  
Expert Agent on Agricultural Pro-  
ducts, Industrial Commission.
- JOHN H. DYNES, 1896-98,  
A.M., 1897; University Fellow,  
1897-98,  
Student Clerk, Division of Methods  
and Results, Twelfth Census.
- CHARLES E. EDGERTON, 1898-99,  
FREDERICK S. HALL, 1896-97,  
Ph.D., 1898,  
Special Agent, Industrial Commission.  
Clerk, Division of Manufactures,  
Twelfth Census.
- LEONARD W. HATCH, 1894-95,  
Statistician, Bureau of Labor, Albany,  
New York.
- ISAAC A. HOURWICH, 1891-92,  
Ph.D., 1893,  
Translator, Bureau of the Mint, Wash-  
ington, D. C.
- MAURICE L. JACOBSON, 1892-95,  
Librarian, Bureau of Statistics, Treas-  
ury Department, Washington,  
D. C.
- WILLIAM Z. RIPLEY, 1891-93,  
University Fellow, 1891-93;  
Ph.D., 1893,  
Expert on Transportation, Industrial  
Commission.
- FREDERICK W. SANDERS, 1895-96,  
Director, Agricultural Experiment  
Station, New Mexico.
- NAHUM I. STONE, 1897-99,  
Expert on Speculation and Prices, In-  
dustrial Commission, Washington,  
D. C.



ADNA F. WEBER, 1896-97,  
University Fellow, 1896-97;  
Ph.D., 1899.

Chief Statistician, Bureau of Labor,  
Albany, N. Y.

WALTER F. WILLCOX, 1886-88,  
Ph.D., 1891,

Chief Statistician, Census Office,  
Washington, D. C.

Dr. Max West, 1891-93; University Fellow, 1892-93; Ph.D., 1893, should figure in both of the preceding lists; for he has been appointed Chief Clerk in the Division of Statistics, Department of Agriculture, and has also become Associate Professor of Economics in the Columbian University, Washington, D. C.

The direction of organized charity is a field of labor for which our students in Sociology receive an excellent training; and I am glad to report that Mr. Prevey, whose appointment as lecturer in the University of Nebraska is noted above, has also been made General Secretary of the local Charity Organization Society. I have also to report that Mr. Thomas J. Jones, a student in the School during the past four years and Fellow in Sociology, 1900-01, has been appointed Assistant Head Worker in the University Settlement, New York City.

"To give an adequate economic and legal training to those who intend to make journalism their profession" has always been announced as one of the objects of the School of Political Science; and a considerable number of our graduates have become editors. It is more difficult, however, to keep track of journalists than of teachers and governmental officers, and the only recent appointment in this field of which I have been informed is that of Dr. Roeliff M. Breckenridge, Ph.D., 1894, as financial editor of the New York *Journal of Commerce*.

Respectfully submitted,

JOHN W. BURGESS,

*Dean.*

June 10, 1901.

## SCHOOL OF PHILOSOPHY

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### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1901

*To the President of Columbia University  
in the City of New York :*

SIR:

I have the honor to transmit herewith the eleventh annual report upon the work of the Faculty of Philosophy, which report covers the academic year ending June 30, 1901. The statistical tables and summaries appended to the report are in the usual form, with one exception. In previous reports a tabular view marked A has summarized the various courses of instruction and research offered by the Faculty of Philosophy, and has recorded the attendance of graduate students upon each course. The place of this tabular view is now taken by the statistics to be found in the report of the Registrar, pages 286 to 287, which show the attendance of students, primarily registered under the University corporation, upon each of the several courses offered by the various departments included in the Faculty of Philosophy. These statistics, however, cannot be compared with those of previous years, inasmuch as they do not show the total attendance upon each course, students of Teachers College who are candidates for diplomas being omitted from the tabulation. In order that these statistical tables may be complete, it is recommended that hereafter a separate column be added to each table to show the attendance, upon any course, of students in Teachers College who are candidates for a diploma, but not for a University degree. The University Fellows who were appointed for the year in the departments represented in the Faculty are named in

the statement marked A, and following the name of each Fellow will be found an outline of the special work which he has undertaken during the year. The recommendations for university degrees of students whose major subject fell under the jurisdiction of this Faculty are given in statement B.

As announced a year ago, the annual report for the year ending June 30, 1900, was the last to include in the statistical tables the number of Seniors in Columbia College and in Barnard College who elected courses of instruction in Philosophy, Philology, or Letters, as part of their work for the degree of Bachelor of Arts. These students, being collegiate, or undergraduate, students, have, since the recent amendment to the Statutes, no place in the statistics of this Faculty. This fact is to be borne in mind in comparing the statistics of the present and subsequent years with those of the first ten years of the Faculty's activity.

During the year covered by this report, the total number of students pursuing studies wholly or in part under the direction of this Faculty has been 300. As compared with the total of 382 shown in the report one year ago, this is a decrease of 82; but in that report were included the names of 107 Seniors in Columbia College and in Barnard College. Deducting these, the total number of graduate students engaged in work under the direction of this Faculty for the year ending June 30, 1900, was 275. Compared with this total, the total for the year ending June 30, 1901 (300) shows an increase of 25, or 9 per cent. The composition of the list of students is as follows:

|  |  |       |           |
|--|--|-------|-----------|
| 1. Primary registration :  |  |       |           |
| Students holding a Bachelor's degree, or its equivalent from a foreign institution : |  |       |           |
| Men .....  |  | 153   |           |
| Women.....   |  | 91    |           |
|  |  | <hr/> | 244       |
| 2. Secondary registration :  |  |       |           |
| From the Faculty of Political Science.....   |  |       |           |
| "    "    "    " Pure Science.....   |  | 26    |           |
| "    "    "    " Teachers College.....   |  | 16    |           |
|  |  | 14    |           |
|  |  | <hr/> | 56        |
| Total.....   |  |       | <hr/> 300 |

The 14 students from Teachers College included in the secondary registration under this Faculty were not candidates for the degree of Master of Arts or Doctor of Philosophy. Teachers College students who are candidates for either of those degrees are, of course, included under the primary registration in this Faculty.

The following table shows the primary registration under this Faculty since its foundation: **Primary Registration**

| Year | Number of students taught     | Primary Registration           |
|------|-------------------------------|--------------------------------|
| 1890 | —                             | (apparently) 27 + 9 women = 36 |
| 1891 | 92                            | 55 + 5 " = 60                  |
| 1892 | 130                           | 77 + 1 " = 78                  |
| 1893 | 130                           | 73 + 10 " = 83                 |
| 1894 | 165                           | 83 + 12 " = 95                 |
| 1895 | 190                           | 95 + 17 " = 112                |
| 1896 | 227                           | 108 + 22 " = 130               |
| 1897 | 263                           | 100 + 51 " = 151               |
| 1898 | 255                           | 121 + 37 " = 158               |
| 1899 | 321                           | 132 + 88 " = 220               |
| 1900 | 382                           | 157 + 85 " = 242               |
| 1901 | 300 (College Seniors omitted) | 153 + 91 " = 244               |

Of the 300 students enrolled under the Faculty of Philosophy, 33 were students in the theological seminaries of New York, admitted to University privileges in accordance with the resolutions of the Trustees passed April 7, 1890. Of these students, 18 came from the Union Theological Seminary, 9 from the Jewish Theological Seminary, 4 from the General Theological Seminary, and 2 from Drew Theological Seminary.

The total number of auditors enrolled during the year was 28, an increase of 3 over the previous year. These auditors were distributed among the several departments, as follows: **Auditors**

|                                  |   |
|----------------------------------|---|
| Comparative Literature.....      | 8 |
| English.....                     | 3 |
| Germanic Languages.....          | 3 |
| Linguistics.....                 | 1 |
| Music.....                       | 7 |
| Philosophy and Education.....    | 2 |
| Psychology and Anthropology..... | 4 |
| Romance Languages .....          | 4 |

The degrees held by the 244 graduate students primarily enrolled under this Faculty are tabulated in the report of the Registrar, on page 255. The colleges and universities conferring these degrees are tabulated in the same report, on pages 251 to 254.

**Courses** The number of courses of instruction and research given during the year 1900-1901 by the various departments represented in the Faculty of Philosophy, as compared with those of the previous year, were as follows:

| Department                    | Number of<br>Courses | Increase | Decrease |
|-------------------------------|----------------------|----------|----------|
| Comparative Literature.....   | 9                    | 2        | —        |
| English .....                 | 15                   | 6        | —        |
| Germanic Languages.....       | 14                   | —        | —        |
| Greek .....                   | 9                    | 3        | —        |
| Indo-Iranian Languages.....   | 10                   | 1        | —        |
| Latin .....                   | 14                   | 1        | —        |
| Linguistics.....              | 1                    | —        | —        |
| Music.....                    | 6                    | —        | 3        |
| Philosophy and Education....  | 10                   | —        | —        |
| Psychology and Anthropology.. | 15                   | 1        | —        |
| Romance Languages.....        | 15                   | 4        | —        |
| Semitic Languages.....        | 8                    | —        | 3        |
|                               | <hr/>                | <hr/>    | <hr/>    |
| Totals.....                   | 126                  | 18       | 6        |
|                               |                      | <hr/>    | <hr/>    |
| Net increase.....             |                      | 12       |          |

**Tables** The following tables, showing the number of University Fellows appointed and their chief departments of study, the departments in which recipients of the degrees of Doctor of Philosophy and Master of Arts have severally carried on their major and minor studies, and the total number of higher degrees conferred since the establishment of the Faculty, are self-explanatory:

**NUMBER OF FELLOWS APPOINTED, CLASSIFIED ACCORDING TO  
DEPARTMENTS**

|  | 1890<br>to<br>1900 | 1901 | Total |
|--|--------------------|------|-------|
| <i>Division of Philosophy and Psychology :</i> |                    |      |       |
| Philosophy.....                                | 11                 | 2    | 13    |
| Psychology.....                                | 7                  | 1    | 8     |
| Anthropology .....                             | 1                  | ..   | 1     |
| Education .....                                | 5                  | ..   | 5     |
| <i>Division of English and Literature :</i>    |                    |      |       |
| English .....                                  | 6                  | 2    | 8     |
| Comparative Literature.....                    | 5                  | 1    | 6     |
| <i>Division of Classical Philology :</i>       |                    |      |       |
| Greek.....                                     | 4                  | 1    | 5     |
| Latin.....                                     | 8                  | 1    | 9     |
| Comparative Philology .....                    | 9                  | 1    | 10    |
| <i>Division of Modern European Languages :</i> |                    |      |       |
| Germanic Languages.....                        | 7                  | ..   | 7     |
| Romance Languages.....                         | 9                  | ..   | 9     |
| <i>Division of Oriental Languages :</i>        |                    |      |       |
| Semitic Languages.....                         | 3                  | 1    | 4     |
| Indo-Iranian Languages.....                    | 2                  | 1    | 3     |
|  | 77                 | 11   | 88    |

**DEGREE OF DOCTOR OF PHILOSOPHY, MAJOR SUBJECTS  
CLASSIFIED ACCORDING TO DEPARTMENTS**

|  | 1891<br>to<br>1900 | 1901 | Total |
|--|--------------------|------|-------|
| <i>Division of Philosophy and Psychology :</i> |                    |      |       |
| Philosophy.....                                | 9                  | 1    | 10    |
| Psychology.....                                | 6                  | 1    | 7     |
| Anthropology .....                             | ..                 | 1    | 1     |
| Education.....                                 | 8                  | 1    | 9     |
| <i>Division of English and Literature :</i>    |                    |      |       |
| English .....                                  | 6                  | ..   | 6     |
| Comparative Literature.....                    | 3                  | ..   | 3     |
| <i>Division of Classical Philology :</i>       |                    |      |       |
| Greek.....                                     | 4                  | ..   | 4     |
| Latin .....                                    | 4                  | ..   | 4     |
| Comparative Philology .....                    | ..                 | ..   | ..    |
| <i>Division of Modern European Languages :</i> |                    |      |       |
| Germanic Languages .....                       | 3                  | 2    | 5     |
| Romance Languages.....                         | 3                  | 1    | 4     |
| <i>Division of Oriental Languages :</i>        |                    |      |       |
| Semitic Languages.....                         | 7                  | 2    |       |
| Indo-Iranian Languages.....                    | 1                  | ..   | 1     |
|  | 54                 | 9    | 6     |

**DEGREE OF DOCTOR OF PHILOSOPHY, MINOR SUBJECTS  
CLASSIFIED ACCORDING TO DEPARTMENTS**

|  | 1891<br>to<br>1900 | 1901 | Total |
|--|--------------------|------|-------|
| <i>Division of Philosophy and Psychology :</i> |                    |      |       |
| Philosophy.....                                | 18                 | 2    | 20    |
| Psychology.....                                | 8                  | 3    | 11    |
| Anthropology.....                              | 5                  | 1    | 6     |
| Education.....                                 | 10                 | 2    | 12    |
| <i>Division of English and Literature :</i>    |                    |      |       |
| English.....                                   | 2                  | 1    | 3     |
| Comparative Literature.....                    | 5                  | 1    | 6     |
| <i>Division of Classical Philology :</i>       |                    |      |       |
| Greek.....                                     | 11                 | ..   | 11    |
| Latin.....                                     | 8                  | ..   | 9     |
| Comparative Philology.....                     | ..                 | ..   | ..    |
| <i>Division of Modern European Languages :</i> |                    |      |       |
| Germanic Languages.....                        | 10                 | 2    | 12    |
| Romance Languages.....                         | 8                  | 1    | 9     |
| <i>Division of Oriental Languages :</i>        |                    |      |       |
| Semitic Languages.....                         | 9                  | 2    | 11    |
| Indo-Iranian Languages.....                    | 4                  | 1    | 5     |
|  | 104                | 17   | 121   |

**DEGREE OF MASTER OF ARTS, MAJOR SUBJECTS  
CLASSIFIED ACCORDING TO DEPARTMENTS**

|  | 1891<br>to<br>1900 | 1901 | Total |
|--|--------------------|------|-------|
| <i>Division of Philosophy and Psychology :</i> |                    |      |       |
| Philosophy.....                                | 27                 | 3    | 30    |
| Psychology.....                                | 3                  | ..   | 3     |
| Anthropology.....                              | ..                 | 1    | 1     |
| Education.....                                 | 28                 | 19   | 47    |
| <i>Division of English and Literature :</i>    |                    |      |       |
| English.....                                   | 13                 | 10   | 23    |
| Comparative Literature.....                    | 34                 | 5    | 39    |
| <i>Division of Classical Philology :</i>       |                    |      |       |
| Greek.....                                     | 10                 | 2    | 12    |
| Latin.....                                     | 14                 | 3    | 17    |
| Comparative Philology.....                     | ..                 | ..   | ..    |
| <i>Division of Modern European Languages :</i> |                    |      |       |
| Germanic Languages.....                        | 14                 | 2    | 16    |
| Romance Languages.....                         | ..                 | 2    | 2     |
| <i>Division of Oriental Languages :</i>        |                    |      |       |
| Semitic Languages.....                         | 8                  | 1    | 9     |
| Indo-Iranian Languages.....                    | 2                  | ..   | 2     |
| <i>Department of Music :</i>                   | 2                  | ..   | 2     |
|  | 155                | 48   | 203   |

DEGREE OF MASTER OF ARTS, MINOR SUBJECTS  
CLASSIFIED ACCORDING TO DEPARTMENTS

|  | 1891<br>to<br>1900 | 1901 | Total |
|--|--------------------|------|-------|
| <i>Division of Philosophy and Psychology :</i> |                    |      |       |
| Philosophy.....                                | 30                 | 4    | 34    |
| Psychology.....                                | 13                 | 5    | 18    |
| Anthropology.....                              | 9                  | ..   | 9     |
| Education.....                                 | 40                 | 18   | 58    |
| <i>Division of English and Literature :</i>    |                    |      |       |
| English.....                                   | 37                 | 19   | 56    |
| Comparative Literature.....                    | 43                 | 8    | 51    |
| <i>Division of Classical Philology :</i>       |                    |      |       |
| Greek.....                                     | 34                 | 6    | 40    |
| Latin.....                                     | 18                 | 8    | 26    |
| Comparative Philology.....                     | 1                  | 1    | 2     |
| <i>Division of Modern European Languages :</i> |                    |      |       |
| Germanic Languages.....                        | 25                 | 3    | 28    |
| Romance Languages.....                         | 15                 | 5    | 20    |
| <i>Division of Oriental Languages :</i>        |                    |      |       |
| Semitic Languages.....                         | 16                 | 2    | 18    |
| Indo-Iranian Languages.....                    | 12                 | 1    | 13    |
|  | 293                | 80   | 373   |

TOTAL NUMBER OF HIGHER DEGREES CONFERRED

|                | 1891<br>to<br>1900 | 1901 | Total |
|----------------|--------------------|------|-------|
| <i>Ph.D. :</i> |                    |      |       |
| Men.....       | 51                 | 9    | 60    |
| Women.....     | 3                  | ..   | 3     |
|                | 54                 | 9    | 63    |
| <i>A.M. :</i>  |                    |      |       |
| Men.....       | 114                | 25   | 139   |
| Women.....     | 41                 | 23   | 64    |
|                | 155                | 48   | 203   |

During the year the Faculty have taken the action shown below in the extracts from the Minutes, on matters of general University interest and importance: **Faculty Legislation**

(Jan. 11, 1901)—*Resolved*, That the Faculty be divided into three groups for the purpose of holding examinations for the degree of doctor of philosophy—special provision being made for music: (1) philosophy and psychology, (2) ancient languages, (3) modern European languages—it being



the duty of each professor in a group to attend the examination of every candidate whose major subject lies within that group, and to participate in such examination.

(Jan. 11, 1901)—*Resolved*, That a candidate for the degree of doctor of philosophy be not required to submit his dissertation to his examiners in printed form before it is known whether or not he is to be recommended for the degree.

(Jan. 11, 1901)—*Resolved*, That it would be advantageous to permit a candidate, with the consent of the Dean and the professor in charge of his major subject, (a) to select one minor subject, instead of two, doing at least double the amount of work now required in a minor subject; (b) to divide a minor subject, taking parts of two subjects germane to his main subject of study.

The latter resolution was transmitted to the University Council on March 8, 1901, with the recommendation of the Faculty that it be adopted as a rule of the University.

(May 10, 1901)—*Resolved*, That the Trustees be requested to assign seats in the Faculty of Philosophy to the Adjunct Professor of the History of Education, and to the Professor of School Administration in Teachers College.

The work of the Faculty has gone forward during the year without unusual incident or interruption of any kind, and there are no recommendations to be made at this time which call for the attention of the President or Trustees.

Respectfully submitted,

NICHOLAS MURRAY BUTLER,

*Dean.*

June 30, 1901.

## Statement A

## UNIVERSITY FELLOWS, 1900-1901

1. Hartley Burr Alexander . . . Philosophy.  
 University of Nebraska, A.B., 1897; University of Pennsylvania; Harrison Fellow, 1898-1900.  
 Subjects of investigation: Critical Analysis of Mr. Bradley's *Principles of Logic*; Studies in Aristotle's *Metaphysics*; The Meaning of "Explanation" in Philosophy and Science; A New Principle for Experiments in *Æsthetics*.  
 Topics for papers or lectures: Doctor's dissertation: What Constitutes Metaphysical Explanation; The Concept of Consciousness; Hegel's Doctrine of the Idea; Commentary on a Chapter from Lotze; Aristotle's Theory of *γεραιός*; Studies in Association; On the Method and Meaning of Psychological Experimentation in *Æsthetics*.
2. Agnes Baldwin . . . Greek.  
 (Annual Fellow.)  
 Columbia University, A.B., 1897; A.M., 1900.  
 Subjects of investigation: Topography of Argolis and Boeotia; The Mycene Collection; The Evolution of the Greek Alphabet.  
 Topic for paper: A Bronze Coin of Bithynia.
3. Allan Perley Ball . . . Latin.  
 Amherst College, A.B., 1892; A.M., 1895.  
 Subjects of investigation: Seneca's "Ludus de morte Claudii Cæsaris"; The Syntax of Plebeian Latin; Various Questions in Roman Archæology and Epigraphy.  
 Topics for papers or lectures: The *Termini* of the *Pomerium* and of the banks of the Tiber; Latin Inscriptions on Metal Ornaments and Utensils; *Collaria Fugitivorum*; Roman Oculists' Stamps; Inscribed Roman Pottery; The *Acta Fratrum Arvalium*; Plebeian Traits of the Syntax of Petronius's "Cena Trimalchionis," and of the "*Bellum Africanum*," Plautus's "*Mostellaria*" and "*Trinummus*," and Persius's Satires.
4. Israel Davidson . . . Semitic.  
 College of the City of New York, A.B., 1895; Columbia University, Scholar in Semitic, 1895-96, and Graduate Student, 1898-1900.  
 Subject of investigation: The History of Hebrew Belles-Lettres from the close of the Canon to the present time.

Topics for papers or lectures: A Critical Survey of Hebrew Belles-Lettres; Parody in Hebrew Literature; The School of Biblical Imitators; A Dictionary of Pseudonyms in Modern Hebrew Literature; Bibliography of Translations from English into Hebrew (presented to Professor W. P. Trent).

5. John Erskine . . . English.

Columbia University, A.B., 1900; Proudfit Fellow in Letters, 1900-1901.

Subjects of investigation: Chaucer's Narrative Method; The Metrical Peculiarities of the Later Entries in the Anglo-Saxon Chronicle.

Topics for papers or lectures: The Vowel System of Strong Verbs in Langland's *Piers Plowman*; The Comedy Elements in the "Tragedy of Blood"; Isaak Walton; The Poetry of Henry Vaughan.

6. Frank Andrews Fall . . Comparative Literature.

Albion College, A.B., 1899.

Subjects of investigation: Evolution of the Epic; Lyric Poetry of Europe during the Middle Age and the Renaissance; Romanticism in England, France, and Germany in the Eighteenth Century.; Petrarch, the Father of Humanism; History of Criticism.

Topics for papers or lectures: Origin, Nature, and Literary Importance of Les Fabliaux; The Methodist Movement and the English hymn-writers in their Relation to the Growth of Romanticism; Petrarch's Life and Relations with Laura; Character-Study of Mezentius; Origins of Feudalism; Historical and Literary Significance of Jonas's Life of St. Columban.

7. William Harry Heck . . . English.

Wake Forest College, A.B., 1897, and A.M., 1899; Columbia University, 1899-1900.

Subjects of investigation: Life, Works, and Times of Andrew Marvell; Development of the English Language during the Fourteenth and Fifteenth Centuries.

Topics for papers or lectures: The Comic Relief in the English Domestic Tragedies before Shakespeare; The Dramas of Fielding; Three Dramatizations of the Ion Story—Euripides' "Ion," William Whitehead's "Creusa," and T. N. Talfourd's "Ion"; The Conjunctural System of "Piers the Plowman" and "Richard the Redeless"; Reports on Teaching in the Horace Mann High School; Per cent. of Foreign Words in Langland, Chaucer, and Gower.

## 8. Bert Hodge Hill . . . Classical Philology.

(Henry Drisler Fellow, resident in Athens.)

University of Vermont, A.B., 1895; Columbia University, A.M., 1900; Fellow in Greek, 1898-1900.

Subjects of investigation: Topography and Monuments of Athens; Development of the Attic Alphabet; Early Greek Sculpture; The Erechtheum; Topography of Corinth; Some Vases of Daris, Hiero, and Euphronios.

Topics for papers or lectures: Treasurers' Account for the Athenian Expeditions to Corcyra (C. I. A., I: 179); Latin Inscriptions from Corinth.

## 9. Montgomery Schuyler, Jr., Indo-Iranian Languages.

Columbia College, A.B., 1899; Columbia University, A.M., 1900.

Subjects of investigation: The Sanskrit Drama; The Fragments of the Avesta; The History of the Alphabet; The Influence of Oriental Literature upon English Literature; Rumanian Phonology; Modern Dutch Literature; The Middle Low German Beast-epic, etc.

Topics for papers or lectures: Notes on the *Natyasastra* of Bharata (presented to the *American Oriental Society*, April, 1901); Fish in the Avesta (*American Oriental Society*, April, 1901); Avestan Etymologies; The Beginnings of Sanskrit Studies in England (read before the Seminar in Comparative Literature); the Middle Low German *Reinke de Vos* and its relations with other Beast-epics and with the Oriental Beast-fables (read before the Germanic Seminar); A Translation of *De kleine Johannes* by Frederik van Eeden; The Poetical Work of Gabriele d'Annunzio; The Modern Alphabets of India; The Origin and Development of the Oriental Fable (Columbia University, March 5, 1901); The Story of the Alphabet (Public School No. 3, April 25, 1901).

Publications: A Bibliography of the Sanskrit Drama (Columbia University Indo-Iranian Series, Vol. 3—in preparation); Index Verborum of the Fragments of the Avesta (Columbia University Indo-Iranian Series, Vol. 4—in press); The Translations and Editions of Çakuntalā (*Journal of American Oriental Society*, Vol. 22); The Sanskrit Words in the Greek Glosses of Hesychios (in collaboration with Dr. Louis H. Gray, in *American Journal of Philology*); Dutch Poets of New Amsterdam (in *New York Times*, Saturday Review).

## 10. Clark Wissler . . . Psychology.

Indiana University, A.B., 1897, and A.M., 1899.

Subjects of investigation: The Correlation found in Mental and Physical Tests; Perception in the Region of the Blind Spot.

Topics for papers or lectures: Fatigue as a Problem in Psychology and Education; The Question of Mental and Physical Sex Difference; Physical and Mental Tests on School Children; The Legal Status and History of Secondary Schools in Indiana; The Recapitulation Theory from the Anthropological Side; Correlation in Mental Tests, read before the New York Academy of Sciences, Section of Psychology and Anthropology; The Correlation of Mental and Physical Tests, monograph supplement to the *Psychological Review*, 1901.

## 11. Franklin Zeiger . . . Philosophy.

Columbia College, A.B., 1898; Columbia University, A.M., 1900.

Subject of investigation: The Relation between Will and Belief.

Topics for papers or lectures: The Grounds of Theistic Belief; Causality, Freedom, and the Concept of Energy; The Place of Latin in the Secondary School; A Comparison of the Horace Mann High School with the Public High School at Montclair, N. J.; The Scientific and Pedagogical Treatment of the Latin Conditional Sentence; The Scientific and Pedagogical Treatment of the Greek Dative Case.

*Statement B*

## RECOMMENDATIONS FOR DEGREES, 1900-1901

Of students having the major subject under the Faculty of Philosophy

## I.—DOCTOR OF PHILOSOPHY

| Candidate   | Major Subjects                      | Minor Subjects   | Title of Dissertation   |
|---|-------------------------------------|--|---|
| 1. Hartley Burr Alexander,<br>A.B., University of Nebraska, 1897.   | Philosophy.                         | Logic; Psychology.   | What constitutes metaphysical explanation.                            |
| 2. Charles Alfred Dwyer,<br>A.B., College of the City of New York, 1886.  | Romance languages and literatures.  | Romance languages and literatures; Latin.                          | Frédéric Mistral, poet and leader in Provence.                        |
| 3. Alfred Louis Kroeber,<br>A.B., Columbia University, 1896; A.M., 1897.  | Anthropology.                       | Psychology; Literature.  | Decorative Symbolism of the Arapahoe.                                 |
| 4. George Washington Andrew Luckey,<br>A.B., Stanford University, 1894.   | Education.                          | Education; Psychology.   | The Professional Training of secondary teachers in the United States. |
| 5. Arthur Frank Joseph Remy,<br>A.B., College of the City of New York, 1890; A.M., Columbia University, 1897.                                       | Germanic languages and literatures. | Germanic languages and literatures; Sanskrit.                      | The influence of India and Persia on the Poetry of Germany.           |
| 6. Nathan Stern,<br>A.B., Columbia University, 1898; A.M., 1899.  | Semitic languages and literatures.  | Semitic languages and literatures; <i>Sociology and statistics</i> | The Jewish historico-critical school of the nineteenth century.       |
| 7. Rudolf Tombo, Jr.,<br>B.S., College of the City of New York, 1895; A.M., Columbia University, 1898; M.S., College of the City of New York, 1899. | Germanic languages and literatures. | Germanic languages and literatures; Anglo-Saxon.                   | Ossian in Germany.  |
| 8. Stephen Seymour Wise,<br>A.B., Columbia University, 1892.  | Semitic languages and literatures.  | Semitic languages and literatures; Philosophy.                     | The ethics of the Ibn Gebirol.  |
| 9. Clark Wissler,<br>A.B., Indiana University, 1897; A.M., 1899.  | Psychology.                         | Anthropology; Education.   | The Correlation of mental and physical tests.                         |

## II.—MASTER OF ARTS

| Candidate   | Major Subjects                             | Minor Subjects  | Title of Essay  |
|---|--|---|---|
| 1. Lewis Burton Alger,<br>Ph.B., University of<br>Michigan, 1897.   | Education.                                 | Education;<br><i>Geography</i> .  | The Place of excursions<br>in the curriculum.   |
| 2. John Hampton Atkin-<br>son.<br>Ph.B., Ohio Univer-<br>sity, 1897.  | English.                                   | English; Edu-<br>cation.  | Nathaniel Lee.  |
| 3. Arthur Pond Bald-<br>win,<br>A.B., College of the<br>City of New York,<br>1876.                                | Education.                                 | Psychology;<br><i>Political<br/>economy<br/>and finance<br/>and Sociol-<br/>ogy and sta-<br/>tistics</i> .      | Mathematics in second-<br>ary education.  |
| 4. Milton Bennion,<br>B.S., University of<br>Utah, 1897.  | Education.                                 | Philosophy;<br>Psychology.  | The Methods of testing<br>the eyesight of school<br>children.   |
| 5. Carrie Winifred Blair,<br>A.B., Arcadia Univer-<br>sity, 1898.   | Education.                                 | English; Edu-<br>cation.  | The Development of an-<br>notated English clas-<br>sics for secondary<br>schools.                                       |
| 6. Marion Raymond<br>Brown,<br>A.B., Wells College,<br>1898.  | Education.                                 | Education;<br><i>Botany</i> .   | History of the develop-<br>ment of method in<br>secondary teaching of<br>biology, with special<br>reference to zoology. |
| 7. Jane Brodie Carpen-<br>ter,<br>A.B., Mount Holyoke<br>College, 1898.   | Education.                                 | Education;<br>English.  | The Development of the<br>curriculum in Phillips<br>Andover Academy.  |
| 8. George Stanislaus<br>Connell,<br>A.B., Columbia Uni-<br>versity, 1894; LL.B.,<br>Catholic University,<br>1896. | English.                                   | <i>Political<br/>economy<br/>and finance;<br/>Roman Law<br/>and com-<br/>parative<br/>jurispru-<br/>dence</i> . | Humor as a foil for tra-<br>gedy.   |
| 9. Alice Belle Dawson,<br>A.B., Oxford College,<br>1891.  | Education.                                 | Education;<br>Latin.  | Development of method<br>in Latin in the second-<br>ary schools of the<br>United States.                                |
| 10. Gustave - Adolphe<br>Dionne,<br>A.B., Wooster Col-<br>lege, 1893.   | Romance lan-<br>guages and<br>literatures. | Romance lan-<br>guages and<br>literatures;<br>German<br>languages<br>and litera-<br>tures.                      | The Lyrical elements in<br>the dramas of Victor<br>Hugo.  |
| 11. Loring Holmes Dodd,<br>A.B., Dartmouth Col-<br>lege, 1900.  | Education.                                 | Education;<br>English.  | College entrance require-<br>ments in English.  |

| Candidate   | Major Subjects                 | Minor Subjects   | Title of Essay  |
|---|--------------------------------|--|---|
| 12. Elizabeth Hickman du Bois,<br>A.B., Cornell University, 1897.           | Latin language and literature. | Roman archæology; Greek archæology.                      | The Uses of <i>Tamquam</i> in Tacitus.  |
| 13. John Erskine,<br>A.B., Columbia University, 1900.                       | English.                       | English; Italian language and literature.                | Chaucer's narrative method.   |
| 14. Daisy Gaus,<br>A.B., Vassar College, 1900.                              | Comparative literature.        | Comparative literature; Italian language and literature. | Petrarch as a lyric poet.   |
| 15. Robert Malcolm Gay,<br>A.B., Brooklyn Polytechnic Institute, 1900.      | Comparative literature.        | Comparative literature; English.                         | The Decline of allegory in England and France.  |
| 16. Juliette Golay,<br>A.B., Vassar College, 1894.                          | Greek language and literature. | Greek archæology; Latin.                                 | Plato's myths of the life hereafter.  |
| 17. Jules Eckert Goodman,<br>A.B., Harvard University, 1899.                | English.                       | English; Education.                                      | University plays produced at the universities of Cambridge and Oxford in the time of Queen Elizabeth and James I. |
| 18. Nelle Julia Gould,<br>A.B., Smith College, 1898.                        | Education.                     | Education; Latin.  | The Grammar schools of the New England colonies during the seventeenth and eighteenth centuries.                  |
| 19. Clayton Meeker Hamilton,<br>A.B., Brooklyn Polytechnic Institute, 1900. | English.                       | English; Comparative literature.                         | Elizabethan tragedy of blood, with especial reference to John Webster.  |
| 20. William Jones,<br>A.B., Harvard University, 1900.                       | Anthropology.                  | Linguistics; Psychology.                                 | A Study of the Chinook and Kattamat languages.  |
| 21. Charles Hillel Kavar,<br>A.B., College of the City of New York,         | Philosophy.                    | Education; Semitic languages and literatures.            | The Influence of Aristotle's ethics on the ethics of Moses Maimonides.  |
| 22. Ernest Beckwith Kent,<br>A.B., Iowa College, 1894.                      | Education.                     | Psychology; <i>Sociology and statistics.</i>             | Constructive work in the elementary school.   |
| 23. David Kelley Lambuth,<br>A.B., Vanderbilt University, 1900.             | English.                       | English; <i>Sociology and statistics.</i>                | The Religious aspects of the poetry of the pre-Raphaelites.   |



| Candidate  | Major Subjects                                 | Minor Subjects   | Title of Essay   |
|--|--|--|--|
| 24. Robert Julius Lau,<br>A.B., Central Penn-<br>sylvania College,<br>1900.  | Semitic lan-<br>guages and<br>literatures.     | Semitic lan-<br>guages and<br>literatures;<br>Turkish.       | Some old-Babylonian in-<br>scriptions.   |
| 25. Anna Mary Locke,<br>A.B., Columbia Uni-<br>versity, 1897.                | Comparative<br>literature.                     | Comparative<br>literature;<br>English.                       | The Development of the<br>Italian pastoral.  |
| 26. Clara Denison<br>Loomis,<br>A.B., Smith College,<br>1900.                | Philosophy.                                    | Philosophy;<br><i>Church his-<br/>tory.</i>                  | Japan's educational sys-<br>tem.   |
| 27. Mary Lovett,<br>A.B., Vassar College,<br>1900.                           | Education.                                     | Education;<br><i>Botany.</i>                                 | Development of method<br>of teaching biology in<br>secondary schools of<br>the United States, with<br>especial reference to<br>botany. |
| 28. Robert Cecil Mc-<br>Mahon,<br>A.B., Wesleyan Uni-<br>versity, 1900.      | Greek archæ-<br>ology.                         | Greek lan-<br>guage and<br>literatures;<br>Latin.            | The Contest of Heracles<br>and Triton in Greek<br>vase-painting.   |
| 29. Mabel Kincheon<br>Mason,<br>A.B., University of<br>Toronto, 1898.        | Education.                                     | Education;<br>French lan-<br>guage and<br>literature.        | A Test of the cultural<br>value of the classics.   |
| 30. Ellen Goodrich<br>Means,<br>A.B., Wellesley Col-<br>lege, 1885.          | English.                                       | English;<br>Compar-<br>ative litera-<br>ture.                | Notes on the influence of<br>Milton in eighteenth-<br>century poetry.  |
| 31. Theodore Clarence<br>Mitchill,<br>A.B., Columbia Uni-<br>versity, 1886.  | Education.                                     | Education;<br>English.                                       | The Treatment of educa-<br>tion in the "Clouds of<br>Aristophanes."  |
| 32. Caroline Louise<br>Mourer,<br>A.B., Western Mary-<br>land College, 1887. | Education.                                     | Education;<br><i>Geography.</i>                              | The Transition from<br>academy to high school<br>in Maryland.  |
| 33. John Muirheid,<br>A.B., Columbia Uni-<br>versity, 1900.                  | Comparative<br>literature.                     | Comparative<br>literature;<br>English.                       | Pastoral Elements in the<br>epics.   |
| 34. Evelyn Osborne,<br>A.B., Columbia Uni-<br>versity, 1900.                 | Romance<br>languages<br>and litera-<br>tures.  | Italian lan-<br>guage and<br>literature;<br>English.         | The Angels and demons<br>of the Divina Com-<br>media compared with<br>those of Paradise Lost.  |
| 35. Annina Periam,<br>A.B., Woman's Col-<br>lege of Baltimore,<br>1898.      | Germanic<br>languages<br>and litera-<br>tures. | Germanic<br>languages<br>and litera-<br>tures; Eng-<br>lish. | Schiller and the fate tra-<br>gedy.  |
| 36. May Hinton Pollock,<br>A.B., Columbia Uni-<br>versity, 1896.             | Education.                                     | Education;<br>Latin.   | Development of method<br>in Latin in the second-<br>ary schools of the<br>United States.   |

| Candidate  | Major Subjects                       | Minor Subjects                                | Title of Essay  |
|--|--------------------------------------|---|---|
| 37. Mary Charlotte Priest,<br>A.B., Columbian University, 1893.          | Comparative literature.              | English; Education.                           | The Pastoral in Don Quixote.  |
| 38. George Payn Quackenbos,<br>A.B., Columbia University, 1900.          | Latin.                               | Greek; Sanskrit.                              | The Phraseology of Roman sepulchral inscriptions.   |
| 39. Robert Insall Raiman,<br>A.B., Columbia University, 1900.            | English.                             | Education; <i>History</i> .                   | English miscellanies in the eighteenth century.   |
| 40. Harriet Ellen Rockwell,<br>B.S., Elmira College, 1890.               | English.                             | English; <i>European history</i> .            | Shakespeare's method of delineating female character.   |
| 41. Edgar Walter Roovers,<br>A.B., Harvard University, 1879.             | Germanic languages and literatures.  | Germanic languages and literatures; Latin.    | The language of Hans Sachs in "Der hürnen Seufrid."   |
| 42. David Samuel Snedden,<br>A.B., Leland Stanford Jr. University, 1897. | Education.                           | Psychology; <i>Sociology and statistics</i> . | Flexibility in the course of study  |
| 43. Leila Clement Spaulding,<br>A.B., Vassar College, 1899.              | Classical archaeology and Epigraphy. | Greek; Latin.                                 | The Birth of Athena, in vase - painting and sculpture.  |
| 44. Louise Emery Tucker,<br>A.B., Adelphi College, 1900.                 | Education.                           | Education; Philosophy.                        | Compulsory education in the State of Massachusetts.   |
| 45. Samuel Marion Tucker,<br>A.B., Wofford College, 1896.                | English.                             | English; Comparative literature.              | The "Troilus Creseyde" of Chaucer as an epos.   |
| 46. Martha Wilbur Watt,<br>Ph.B., Brown University, 1900.                | Education                            | <i>Mathematics</i> ; Philosophy.              | Secondary education in the grades.  |
| 47. Alice Ida Wood,<br>B.S., Wellesley College, 1894.                    | Education.                           | English; Comparative literature               | The History of literature as a secondary school subject.  |
| 48. Harrison King Wright,<br>A.B., Union College, 1899.                  | Philosophy.                          | Greek; <i>History</i> .                       | A Comparison of the views of Paulsen on teleological proof for the existence of God, with those of Martineau and Lindsay. |

## SCHOOL OF PURE SCIENCE

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### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1901.

*To the President of Columbia University  
in the City of New York :*

SIR :

I have the honor to submit the ninth annual report on the work of the Faculty of Pure Science. This report refers to the academic year ending June 30, 1901, and consists, first, of the report of the Dean, and, secondly, of the reports of the heads of departments represented in the Faculty.

The statistics of attendance in the School of Pure Science are summarized in the following statement, and appended thereto is a table giving a summary of the statistics of the School since its organization in 1892. For further details with respect to the School as a whole and with respect to the departments represented therein, reference is made to the report of the Registrar.

The number of students primarily registered in the School shows a decrease from the corresponding number of the preceding year. This decrease is due to a slight falling off in the number of candidates for degrees and to a decided diminution in the number of special students. On the other hand, there has been a decided gain in the number of students primarily registered under other Faculties of the University but pursuing graduate work in the School of Pure Science. The total number of students pursuing graduate work in the School is 112. This number does not include any undergraduates or members of the educational

staff who have pursued advanced work and who have been counted hitherto in some instances in making up the total attendance in the School. Of the total number of students in the School all but four were candidates for higher degrees. The losses of the School during the year have been, then, mainly in the generally undesirable class of special students, and the gains have come from the desirable class of graduate students. A glance at the figures in the last line of the following table shows that progress towards the ideal of the School as one for advanced work only has been steadily maintained :

Number of students primarily registered under the Faculty of Pure Science :

|  |      |
|--|------|
| Candidates for the higher degrees.....   | 59   |
| Students not candidates for degrees..... | 4—63 |

Number of students registered primarily under other Faculties of the University :

|  |      |
|--|------|
| Candidates for the higher degrees from : |      |
| College of Physicians and Surgeons.....  | 32   |
| Schools of Applied Science.....          | 11   |
| School of Philosophy.....                | 2    |
| Teachers College.....                    | 4—49 |

Table showing statistics of School of Pure Science since its organization in 1892 :

|   | 1892-3 | 1893-4 | 1894-5 | 1895-6 | 1896-7 | 1897-8 | 1898-9 | 1899-1900 | 1900-1 |
|---|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| Graduate students registered in School of Pure Science..... | 13     | 25     | 26     | 28     | 36     | 41     | 44     | 65        | 59     |
| Special students registered in School of Pure Science.....  | 6      | 9      | 9      | 7      | 19     | 25     | 29     | 11        | 4      |
| Graduate students registered in other Schools .....         | 3      | 4      | 5      | 8      | 18     | 46     | 52     | 35        | 49     |
| Special students registered in other Schools ..             | ..     | ..     | ..     | ..     | 12     | 15     | 15     | 4         | ..     |
| Totals.....   | 22     | 38     | 40     | 43     | 85     | 127    | 140    | 115       | 112    |
| Totals excluding special students.....                      | 16     | 29     | 31     | 36     | 54     | 87     | 96     | 100       | 108    |

The degree of Doctor of Philosophy was conferred on eight candidates whose major work fell under the Faculty of Pure Science. The following table gives the names of these candidates, the dates and designations of their first degrees and the institutions granting them, and the titles of their dissertations. The average number of years for these candidates elapsing between the time of attainment of the first degree and the attainment of the doctorate is 6 years, the shortest interval being 4 years and the longest being 11 years.

| Candidate.   | Title of Dissertation.   |
|--|--|
| Grace Andrews,<br>B.S., Wellesley College, 1890 ;<br>A.M., Columbia University, 1900.                                | The primitive double minimal surface<br>of the seventh class and its con-<br>jugate. |
| Bergen Davis,<br>B.S., Rutgers College, 1896 ;<br>A.M., Columbia University, 1900.                                   | On a newly discovered phenomenon<br>produced by stationary sound-<br>waves.          |
| Edward Frank Kern,<br>B.S., University of Tennessee,<br>1897.  | The quantitative determination and<br>separation of uranium.                         |
| Joseph Warren Miller, Jr.,<br>B.S., Pennsylvania State College,<br>1897 ;<br>A.M., Columbia University, 1899.        | The elastic properties of helical<br>springs.  |
| Herbert Raymond Moody,<br>B.S., Massachusetts Institute of<br>Technology, 1892 ;<br>A.M., Columbia University, 1900. | Reactions at the temperature of the<br>electric arc.                                 |
| Alfred Newton Richards,<br>A.B., Yale University, 1897 ;<br>A.M., 1899.  | A chemical study of yellow elastic<br>connective tissue.                             |
| Francis Bertody Sumner,<br>B.S., University of Minnesota,<br>1894.   | Kupfer's vesicle and its relation to<br>gastrulation and concrescence.               |
| Leon Laizer Watters,<br>B.S., University of Utah, 1897 ;<br>A.M., Columbia University, 1898.                         | An analytical investigation of <i>salvia<br/>officinalis</i> , Linné.                |

The degree of Master of Arts was conferred on twenty-five candidates whose work fell under the jurisdiction of the Faculty of Pure Science. The following table gives the names of these candidates, the dates and designations of their first degrees and the institutions granting them, and the titles of their essays. The average time interval for these candidates elapsing between the times of attainment

of the first and the higher degree is 3.6 years, the shortest interval being 1 and the longest 10 years. Of the candidates mentioned in this list, nine were simultaneously candidates for the degree of M.D.

| Candidate.  | Title of Essay.   |
|---|---|
| Hermann Morris Adler,<br>A.B., Harvard University, 1897.                | The survival of mammalian muscle after somatic death.   |
| Julian Walter Brandeis,<br>B.S., College of the City of New York, 1894. | A comparison of Fraser's method of cranio-cerebral topography.  |
| Leo Buerger,<br>A.B., College of the City of New York, 1897.            | The composition of white elastic tissue.  |
| Lucius Constant Bulkley,<br>A.B., Columbia University, 1898.            | Some experiments on the survival of mammalian muscle.   |
| Homer Munro Derr,<br>A.B., Leland Stanford Jr. University, 1898.        | The interference of light.  |
| Grace Amelia Dewolf,<br>Ph.B., Bucknell University, 1899.               | The theory of assemblages.  |
| David Charles Eccles,<br>B.S., Columbia University, 1900.               | A review of phenyl-amido-acids and their derivatives, together with a study of the hydration of ethylene cyanide.   |
| Karl Fredrik Göransson,<br>Baccalaureate, Gefle, Sweden, 1897.          | Heat-refining of steel.   |
| Sarah Havens Harlow,<br>B.S., Wellesley College, 1891.                  | A study of the mycorhyza of certain plants.   |
| Charles McGee Heck,<br>A.B., Wake Forest College, 1900.                 | The electrolytic action of alternating currents and its use in the study of polarization.   |
| Marianne Riddle Hodges,<br>A.B., Woman's College of Baltimore, 1900.    | On the contributions of Desargues to modern pure geometry.  |
| Elsie Kupfer,<br>A.B., Columbia University, 1899.                       | Studies in geopyxis and urnula.   |
| William Wolfe Lesem,<br>A.B., Columbia University, 1899.                | The fore-brain of macacus.  |
| Charles Edward Terry Lull,<br>B.S., Lehigh University, 1900.            | The relation of platygonas to the peccaries.  |
| Adèle Oppenheimer,<br>A.B., Radcliffe College, 1897.                    | The nature of the neuro-fibrils.  |
| Leopold Schuyler Quackenbush,<br>Ph.B., Yale University, 1899.          | The circulatory system of amia calva.   |
| Augustin Leon Jean Queneau,<br>B.és S., University of France, 1891.     | The size of grain in igneous rocks.   |
| David Heydorn Ray,<br>A.B., College of the City of New York, 1897.      | First geodetic work in America; being an account of the work of Charles Mason and Jeremiah Dixon in determining the boundary between the royal grants of Lord Baltimore and William Penn, and the incidental measurement of a meridian arc of one degree. |

| Candidate.  | Title of Essay.   |
|---|---|
| Harry Badger Reynolds,<br>A.B., Leland Stanford Jr. University, 1896.     | The genito-urinary system of the ophidia.                             |
| Herman Simon Riederer,<br>B.S., College of the City of New York, 1898.    | The composition and properties of the ferrocyanides.                  |
| Robert Willis Shearman,<br>A.B., Columbia University, 1897.               | On the skull of the chimæroid hydro-lagus collei.                     |
| Alexander Spingarn,<br>B.S., College of the City of New York, 1897.       | Inhibition of muscular contraction.                                   |
| Charles William Stoddart,<br>A.B., Columbia University, 1900.             | The electrolytic production of permanganic acid.                      |
| Gilbert Tolman,<br>B.M.E., University of Maine, 1896.                     | A photometric study of the absorption of light by incandescent gases. |
| George Wonson Vandegrift,<br>A.B., College of the City of New York, 1897. | On the composition of yellow elastic tissue.                          |

One of the gratifying indications of the growth of the School is shown by the increasing number of students from the College of Physicians and Surgeons and from the Schools of Applied Science, who pursue advanced work for the Master's degree under rule 10. The work done by such students is uniformly of a high grade, and thus reflects credit on all branches of the University concerned.

Special mention should be made in this connection, also, of the admirable work of research carried on by the Department of Physiological Chemistry. One of the candidates on whom the degree of Doctor of Philosophy was conferred this year pursued his major work in that branch of chemistry. For details of the work of that department, reference is here made to the report of Professor R. H. Chittenden to the Dean of the College of Physicians and Surgeons.

The growth and influence of the School are well shown also in the positions occupied by its graduates and in the increasing demand for specialists trained in its departments. The demand for such specialists is, indeed, much greater than can be met at present. Perhaps the most striking testimony as to the value of the instruction given in the School is found in the number of instructors from other institutions who are now coming to Columbia to perfect

their knowledge of and capacity for instruction in science. A large proportion of our ablest students is drawn directly from this class.

Attention is respectfully invited to the departmental reports which follow for interesting details with respect to the varied work of the academic staff, Fellows, Scholars, and graduate students. The actual needs of several departments in the way of equipment, laboratory room, and additions to the teaching staff are also worthy of special consideration.

Very respectfully submitted,

R. S. WOODWARD,

*Dean.*



## BARNARD COLLEGE

### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1901

*To the President of Columbia University  
in the City of New York:*

SIR:

I have the honor to submit herewith the twelfth annual report upon the work of Barnard College. This report covers the academic year ending June 30, 1901—the first entire scholastic year passed under the new relationship to Columbia University.

The successful administration of the year has been due entirely to the devotion and wisdom of Professor James Harvey Robinson, who was Acting-Dean of the College from February 1, 1900, to May 1, 1901. Although he carried these administrative duties in addition to heavy departmental work, his success is evinced by the present flourishing condition of the College, and by the universal personal esteem and affection accorded him by both Faculty and students.

The statistics for attendance for the past year will be modified quite perceptibly from those of previous years by the fact that all women graduate students now register directly in the graduate schools. Such students have no connection with Barnard College, except in so far as they may elect undergraduate courses in connection with their advanced work. The statistics of the College, therefore, refer only to undergraduate work for women.

The number of students matriculated during the past academic year is 384, distributed in various classes, as shown in the following.

## COMPARATIVE TABLE OF STUDENTS' ENROLLMENT

|   |       |
|---|-------|
| Seniors.....  | 52    |
| Juniors.....  | 39    |
| Sophomores.....   | 51    |
| Freshmen.....   | 81    |
| Special students (who passed full entrance requirements).....             | 41    |
| Special students in music (who did not pass entrance requirements).....   | 37    |
|   | <hr/> |
| Teachers College students.....  | 301   |
| University students, taking undergraduate courses at Barnard College..... | 54    |
|   | <hr/> |
| Total.....  | 384   |

The six groups of students named first in the above tabulation were registered primarily in Barnard College, and show a geographical distribution of patronage as indicated in the following table of

## GEOGRAPHICAL DISTRIBUTION OF STUDENTS

|  |     |
|--|-----|
| Colorado.....                              | 2   |
| Connecticut.....                           | 5   |
| District of Columbia.....                  | 1   |
| Illinois.....                              | 2   |
| Indiana.....                               | 1   |
| Kentucky.....                              | 1   |
| Louisiana.....                             | 1   |
| Massachusetts.....                         | 1   |
| Minnesota.....                             | 2   |
| Missouri.....                              | 1   |
| New Jersey.....                            | 45  |
| New York (exclusive of New York City)..... | 49  |
| New York City.....                         | 182 |
| Ohio.....                                  | 1   |
| Ontario, Canada.....                       | 1   |
| Pennsylvania.....                          | 1   |
| Vermont.....                               | 1   |
| Virginia.....                              | 2   |
| West Virginia.....                         | 1   |
| Wisconsin.....                             | 1   |

---

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The class which entered in October, 1900, is the first which has been admitted since the abolition of the Group System. Fifteen entrance points (each representing one hour of work weekly for an academic year) must now be presented, of which ten points (in English, mathematics, and Latin) are prescribed. The remaining five points may be chosen at the option of the student, with certain restrictions, from the departments of history, natural science,

**New  
Students**

modern languages, and Greek; allowance also being made for the recognition of advanced standing in certain subjects.

The main facts regarding the new students for the year are shown in the

#### TABLE OF STATISTICS REGARDING NEW STUDENTS

|  |     |
|--|-----|
| Admitted by examination without conditions.....    | 25  |
| Admitted by examination with conditions.....       | 56  |
| Admitted by certificate from other Colleges.....   | 31  |
| To the Senior Class.....                           | 6   |
| To the Junior Class.....                           | 5   |
| To the Sophomore Class.....                        | 1   |
| As special students.....                           | 19  |
| Admitted by Regents' Academic Diploma              |     |
| To the Freshman Class.....                         | 5   |
| Admitted as music students without examinations in |     |
| other subjects.....                                | 18  |
| Total number of new students.....                  | 135 |

The students who were admitted to advanced standing upon certificate from other colleges had received their previous collegiate training in the following

#### COLLEGES REPRESENTED BY TRANSFERRED STUDENTS

| Institution                        | Senior Class | Junior Class | Sophomore | Freshman | Special | Total |
|------------------------------------|--------------|--------------|-----------|----------|---------|-------|
| Adelphi College.....               |              | 1            |           |          |         | 1     |
| Butler College.....                |              |              |           |          | 1       | 1     |
| Bryn Mawr College.....             |              | 1            |           |          |         | 1     |
| Chicago University.....            |              |              |           |          | 1       | 1     |
| Cornell University.....            |              |              |           |          | 1       | 1     |
| Illinois Wesleyan University.....  |              |              |           |          | 1       | 1     |
| Indiana State Normal School.....   |              |              |           |          | 1       | 1     |
| Normal College, New York City..... |              |              |           |          | 2       | 2     |
| Ohio State University.....         |              | 1            |           |          |         | 1     |
| Peabody Normal College.....        |              |              |           |          | 1       | 1     |
| Radcliffe College.....             | 1            |              |           |          | 4       | 5     |
| Smith College.....                 |              |              |           |          | 1       | 1     |
| Syracuse University.....           | 1            |              |           |          |         | 1     |
| Teachers College.....              | 2            | 1            |           |          | 3       | 6     |
| University of Illinois.....        |              |              |           |          | 1       | 1     |
| University of Oxford, England..... |              |              |           |          | 1       | 1     |
| Vassar College.....                |              |              |           |          | 1       | 1     |
| Wellesley College.....             | 1            |              |           |          |         | 1     |
| West Virginia University.....      |              | 1            |           |          |         | 1     |
| Woman's College of Baltimore.....  | 1            |              | 1         |          |         | 2     |

Of the six students who transferred into the Senior Class, four did so in order to obtain a baccalaureate degree and a Teachers College professional diploma at the same time. Two of these came from Teachers College, one from Wellesley College, and the fourth from Syracuse University.

There have been eight withdrawals during the year, one by request, two for financial reasons, and five for ill-health. Miss Susie Harris Bogia, of the Sophomore Class, **With-** who withdrew in December, 1900, for ill-health, **drawals** died at her home in Passaic, N. J., on May 16, 1901.

Fifty Seniors successfully met the requirements for graduation, and received the baccalaureate degree at the Commencement exercises on June 12th. Fourteen Seniors **Graduates** also took a Secondary Diploma from Teachers College at the same time with their Bachelor of Arts degree.

The greatest departmental expansion of the year has been made in English Literature. Professor William Peterfield Trent was called from the University of the South **Depart-** and appointed to a professorship upon a Barnard College foundation. This gratifying appointment made it possible to offer several new and valuable **mental** **Growth** courses which have been highly appreciated by the students.

In other departments the growth has represented merely the natural enlargement attendant upon increased numbers of students, and the healthy tendency to perfect and develop every course to its utmost efficiency. A tabulation is given below which shows the courses of study given during the year, and the numbers of students of various classes who have pursued these courses.

DEPARTMENTAL STATISTICS  
DEPARTMENT OF ASTRONOMY

| No. | Title of Course         | Instructors | Hours<br>a<br>week | Students                       |          |                                 |       |
|-----|-------------------------|-------------|--------------------|--------------------------------|----------|---------------------------------|-------|
|     |                         |             |                    | A.B.                           | Specials | Teachers<br>College<br>Students | Total |
| *1  | General Astronomy ..... | Rees .....  | 2                  | 7                              | .....    | .....                           | 7     |
|     |                         |             |                    | Total number of students. .... |          |                                 |       |
|     |                         |             |                    | 7                              |          |                                 |       |

\*Given at Columbia.

DEPARTMENT OF BOTANY

| No. | Title of Course                                    | Instructors          | Hours<br>a<br>week      | Students                       |          |                                 |       |
|-----|--|----------------------|-------------------------|--------------------------------|----------|---------------------------------|-------|
|     |  |                      |                         | A.B.                           | Specials | Teachers<br>College<br>Students | Total |
| 51  | Elementary Botany .....                            | Richards, Watterson. | 3                       | 11                             | 3        | 3                               | 17    |
| 52  | General Morphology and Development of Plants ..... | Dunn .....           | 4 or 5                  | 3                              | 1        | 1                               | 5     |
| 53  | Determination of Phanerogams .....                 | Dunn .....           | 2                       | 1                              | .....    | .....                           | 1     |
| 54  | Anatomy of Vascular Plants .....                   | Richards .....       | { 1st hf. yr.<br>4<br>2 | 2                              | .....    | 1                               | 3     |
| 55  | Physiology of Plants .....                         | Richards .....       | { 2d hf. yr.<br>4       | 2                              | .....    | 1                               | 3     |
| 56  | Morphology of Algae and Higher Cryptogams .....    | Richards .....       | { 2d hf. yr.<br>4       | 1                              | .....    | 1                               | 4     |
| 58  | Advanced Physiology and Morphology .....           | Richards .....       | 4                       | .....                          | .....    | 1                               | 1     |
|     |  |                      |                         | Deduction for repetition. .... |          |                                 |       |
|     |  |                      |                         | 34                             |          |                                 |       |
|     |  |                      |                         | 4                              |          |                                 |       |
|     |  |                      |                         | Total number of students. .... |          |                                 |       |
|     |  |                      |                         | 30                             |          |                                 |       |

## DEPARTMENT OF CHEMISTRY

| No. | Title of Course                   | Instructors              | Hours<br>a<br>week | Students                           |          |                                 |                        |
|-----|-----------------------------------|--------------------------|--------------------|------------------------------------|----------|---------------------------------|------------------------|
|     |                                   |                          |                    | A.B.                               | Specials | Teachers<br>College<br>Students | University<br>Students |
| 1   | General Inorganic Chemistry . . . | Maltby, Keller . . . . . | 4                  | 12                                 | 2        | .....                           | .....                  |
| 3   | Physical Chemistry . . . . .      | Maltby . . . . .         | 3                  | 1                                  | .....    | .....                           | .....                  |
| 7   | Qualitative Analysis . . . . .    | Maltby, Keller . . . . . | 5                  | 2                                  | .....    | 1                               | .....                  |
| 20  | Elementary Organic Chemistry..    | Maltby . . . . .         | 3                  | 2                                  | .....    | 1                               | .....                  |
|     |                                   |                          |                    | Deduction for repetition . . . . . |          |                                 |                        |
|     |                                   |                          |                    | Total number of students . . . . . |          |                                 |                        |
|     |                                   |                          |                    | 21                                 |          |                                 |                        |
|     |                                   |                          |                    | 1                                  |          |                                 |                        |
|     |                                   |                          |                    | 20                                 |          |                                 |                        |

## DEPARTMENT OF ECONOMICS AND SOCIAL SCIENCE

| No. | Title of Course  | Instructors        | Hours<br>a<br>week   | Students                           |          |                                 |                        |
|-----|--|--------------------|--|------------------------------------|----------|---------------------------------|------------------------|
|     |  |                    |  | A.B.                               | Specials | Teachers<br>College<br>Students | University<br>Students |
| A   | Outlines of Economics . . . . .  | Day . . . . .      | $\left\{ \begin{array}{l} 3 \\ \text{1st hf. yr.} \end{array} \right.$ | 41                                 | 8        | 1                               | .....                  |
| 1   | Economic History of England<br>and United States . . . . .                                       | Day . . . . .      | $\left\{ \begin{array}{l} 3 \\ \text{2d hf. yr.} \end{array} \right.$  | 19                                 | 3        | .....                           | .....                  |
| 3   | Problems of Modern Industrial<br>Organization and of the Re-<br>lations of Labor and Capital . . | Day . . . . .      | 3  | 6                                  | .....    | .....                           | .....                  |
| 11  | Communistic and Socialistic<br>Theories . . . . .  | Clark . . . . .    | $\left\{ \begin{array}{l} 2 \\ \text{1st hf. yr} \end{array} \right.$  | 3                                  | .....    | .....                           | 1                      |
| 12  | Theories of Social Reform . . . .  | Clark . . . . .    | $\left\{ \begin{array}{l} 2 \\ \text{2d hf. yr} \end{array} \right.$   | 3                                  | .....    | .....                           | 1                      |
| 15  | Sociology . . . . .  | Giddings . . . . . | 2  | 14                                 | .....    | 2                               | 1                      |
|     |  |                    |  | Deduction for repetition . . . . . |          |                                 |                        |
|     |  |                    |  | Total number of students . . . . . |          |                                 |                        |
|     |  |                    |  | 103                                |          |                                 |                        |
|     |  |                    |  | 26                                 |          |                                 |                        |
|     |  |                    |  | 77                                 |          |                                 |                        |

## DEPARTMENT OF ENGLISH

| No. | Title of Course   | Instructors                        | Hours<br>a<br>week | Students                      |          |                                 |                        |
|-----|---|------------------------------------|--------------------|-------------------------------|----------|---------------------------------|------------------------|
|     |   |                                    |                    | A.B.                          | Specials | Teachers<br>College<br>Students | University<br>Students |
| A   | Rhetoric and English Composition.....                                 | Odell, Gillespy, Gildersleeve..... | 3                  | 78                            | 4        | .....                           | .....                  |
| B   | English Composition.....  | Brewster, Gillespy..               | 2                  | 56                            | 10       | .....                           | .....                  |
| 1   | English Composition.....  | Brewster.....                      | { 1st hf. yr.<br>2 | 20                            | 2        | 3.                              | .....                  |
| 2   | English Composition.....  | Brewster.....                      | { 2d hf. yr.<br>3  | 18                            | 1        | 3                               | .....                  |
| 15  | Anglo-Saxon Literature and Historical English Grammar.                | Trent.....                         | 2                  | 16                            | 1        | 1                               | 1                      |
| 17  | Chaucer: Language, Versification, and Method of Narrative Poetry..... | Price.....                         | 2                  | 2                             | .....    | .....                           | .....                  |
| 19  | Shakspere.....  | Trent.....                         | 2                  | 29                            | 6        | 2                               | 1                      |
| 21  | American Literature.....  | Carpenter.....                     | 2                  | 30                            | 7        | 6                               | .....                  |
| *23 | English Poetry.....   | Trent.....                         | 2                  | 50                            | 6        | 8                               | .....                  |
| *46 | English Literature from 1625-1660.....                                | Trent.....                         | 2                  | 9                             | 1        | .....                           | .....                  |
| *48 | English Literature in the Second Half of the 18th Century..           | Trent.....                         | 2                  | 5                             | .....    | .....                           | .....                  |
|     |   |                                    |                    | Deduction for repetition..... |          |                                 |                        |
|     |   |                                    |                    | Total number of students..... |          |                                 |                        |
|     |   |                                    |                    | 376                           |          |                                 |                        |
|     |   |                                    |                    | 125                           |          |                                 |                        |
|     |   |                                    |                    | 251                           |          |                                 |                        |

\*Given at Columbia.

# DEPARTMENT OF GEOLOGY

| No. | Title of Course      | Instructors  | Hours<br>a<br>week | Students                      |          |                                 |                        |
|-----|----------------------|--------------|--------------------|-------------------------------|----------|---------------------------------|------------------------|
|     |                      |              |                    | A.B.                          | Specials | Teachers<br>College<br>Students | University<br>Students |
| 2   | General Geology..... | Hollick..... | 3                  | 1                             | .....    | 7                               | .....                  |
|     |                      |              |                    | Total number of students..... |          |                                 |                        |
|     |                      |              |                    | 8                             |          |                                 |                        |

# DEPARTMENT OF GERMAN

| No. | Title of Course                                      | Instructors       | Hours.<br>a<br>week | Students                      |          |                                 |                        |
|-----|--|-------------------|---------------------|-------------------------------|----------|---------------------------------|------------------------|
|     |  |                   |                     | A.B.                          | Specials | Teachers<br>College<br>Students | University<br>Students |
| A   | Elementary Course.....                               | Tombo.....        | 3                   | 19                            | 2        | 3                               | 1                      |
| 2   | Grammar, Reading, and Composition.....               | Tombo, Braun..... | 3                   | 29                            | 2        | .....                           | .....                  |
| 3   | Selected Works of Goethe, Schiller, and Lessing..... | Tombo.....        | 3                   | 9                             | 2        | 1                               | 1                      |
| 4   | Historical Prose.....                                | Braun.....        | 3                   | 9                             | 1        | .....                           | 1                      |
| 7   | Goethe's Faust.....                                  | Thomas.....       | 2                   | 14                            | 1        | .....                           | .....                  |
| 8   | Practice in Speaking and Writing German.....         | Tombo.....        | 2                   | 11                            | 2        | 2                               | .....                  |
| *10 | Great German Writers.....                            | Thomas.....       | 2                   | .....                         | 1        | .....                           | .....                  |
|     |  |                   |                     | Deduction for repetition..... |          |                                 |                        |
|     |  |                   |                     | Total number of students..... |          |                                 |                        |
|     |  |                   |                     | 109                           |          |                                 |                        |

\* Given at Columbia.



## DEPARTMENT OF GREEK

| No.  | Title of Course   | Instructors          | Hours<br>a<br>week | Students                      |          |                                 |                        |
|------|---|----------------------|--------------------|-------------------------------|----------|---------------------------------|------------------------|
|      |   |                      |                    | A. B.                         | Specials | Teachers<br>College<br>Students | University<br>Students |
| B    | Selected Readings from Lysias,<br>Plato, and Homer.....                                   | Burchell.....        | 3                  | 19                            | 1        | .....                           | .....                  |
| 1    | Elements of Greek Archaeology.....  | Wheeler.....         | 2<br>{ 1st hf. yr. | 7                             | .....    | 1                               | .....                  |
| 2    | Sight Reading.....  | Earle.....           | 2<br>{ 2d hf. yr.  | 6                             | .....    | 1                               | .....                  |
| 3    | Readings from Euripides, Plato,<br>and Xenophon.....                                      | Earle.....           | 3 or 4             | 16                            | .....    | .....                           | .....                  |
| 4    | Homer.....  | Wheeler.....         | 2                  | 5                             | .....    | .....                           | .....                  |
| 6    | Readings from Sophocles and<br>Thucydides.....  | Earle, Burchell..... | 3                  | 8                             | .....    | .....                           | 1                      |
| 7    | Advanced Composition.....   | Earle.....           | 2                  | 5                             | .....    | .....                           | .....                  |
| * 9  | Lectures on Literature, Poetry,<br>Introduction to the Study of<br>Greek Archaeology..... | Wheeler.....         | 3                  | 2                             | .....    | .....                           | .....                  |
| * 17 | Greek Archaeology.....  | Wheeler.....         | 2                  | 2                             | .....    | .....                           | .....                  |
| * 19 | Lectures on Manners and Customs<br>of Ancient Greeks.....                                 | Young.....           | 2                  | 2                             | .....    | .....                           | .....                  |
| * 20 | Readings from Pausanias.....  | Young, Wheeler.....  | 2                  | 2                             | .....    | .....                           | .....                  |
| 31   | Plato and Aristotle.....  | Earle, Burchell..... | 2                  | 5                             | .....    | .....                           | .....                  |
|      |   |                      |                    | Deduction for repetition..... |          |                                 |                        |
|      |   |                      |                    | Total number of students..... |          |                                 |                        |
|      |   |                      |                    | 83                            |          |                                 |                        |
|      |   |                      |                    | 23                            |          |                                 |                        |
|      |   |                      |                    | 60                            |          |                                 |                        |

\*Given at Columbia.

## DEPARTMENT OF HISTORY

| No. | Title of Course   | Instructors   | Hours<br>a<br>week | Students                      |          |                                 |                        |
|-----|---|---------------|--------------------|-------------------------------|----------|---------------------------------|------------------------|
|     |   |               |                    | A. B.                         | Specials | Teachers<br>College<br>Students | University<br>Students |
| A   | Epochs of Ancient, Mediæval,<br>and Modern History.....   | Shotwell..... | 3                  | 70                            | 11       | 2                               | 1                      |
| 1   | Mediæval and Modern Political<br>History to 1648.....   | Raper.....    | 2                  | 10                            | 4        | .....                           | .....                  |
| 2   | Continental European History..  | Raper.....    | 2                  | 13                            | 2        | 6                               | .....                  |
| 3   | English History to the Reform<br>Bill, 1832.....  | Raper.....    | 3                  | 7                             | .....    | .....                           | 1                      |
| 4   | History of England during the<br>18th and 19th Centuries ..   | Raper.....    | 2                  | 14                            | .....    | 1                               | .....                  |
| 11  | Development of Culture during<br>the later Middle and Renais-<br>sance: the Protestant Revo-<br>lution..... | Robinson..... | 2                  | 18                            | 6        | 3                               | 8                      |
| 14a | Continental History.....  | Robinson..... | 2<br>1st hf. yr.   | .....                         | 1        | 1                               | 3                      |
| 16  | Constitutional History of Eng-<br>land to 1689.....   | Osgood.....   | 2                  | .....                         | .....    | 3                               | 1                      |
|     |   |               |                    | Deduction for repetition..... |          |                                 |                        |
|     |   |               |                    | Total number of students..... |          |                                 |                        |
|     |   |               |                    | 186                           |          |                                 |                        |
|     |   |               |                    | 18                            |          |                                 |                        |
|     |   |               |                    | 168                           |          |                                 |                        |

## DEPARTMENT OF LATIN

| No. | Title of Course  | Instructors          | Hours<br>a<br>week | Students                      |          |                                 |                        |
|-----|--|----------------------|--------------------|-------------------------------|----------|---------------------------------|------------------------|
|     |  |                      |                    | A.B.                          | Specials | Teachers<br>College<br>Students | University<br>Students |
| A   | Selected Letters of Pliny and the Odes and Epodes of Horace...   | Burchell.....        | 3                  | 64                            | 3        | 2                               | .....                  |
| B   | Readings of Selections in Prose and Verse Illustrative of the Public and Private Life of the Romans..... | Knapp.....           | 3                  | 22                            | 2        | .....                           | .....                  |
| 1   | Tacitus's Agricola and Annals and Satires and Epistles of Horace.....                                    | Knapp.....           | 3                  | 15                            | 3        | 2                               | .....                  |
| 2   | Catullus, Tibullus, and Propertius and the Letters of Cicero.....  | Earle, Burchell..... | 2 or 3             | 28                            | 2        | 1                               | 1                      |
| 3   | Juvenal's Satires and Lucretius.....   | McCrea.....          | 3                  | 21                            | 2        | 1                               | .....                  |
| 4   | Andria and Phormio of Terence and Captivi and Mostellaria of Plautus.....                                | Knapp.....           | 2                  | 3                             | .....    | .....                           | .....                  |
| *5  | Roman Epigraphy.....   | Egbert.....          | 2                  | 1                             | .....    | .....                           | .....                  |
| *21 | Roman Numismatics.....   | Olcott.....          | 2                  | 2                             | .....    | .....                           | .....                  |
| 22  | Prose Composition.....   | Knapp.....           | 2                  | 9                             | .....    | .....                           | .....                  |
| *27 | Latin Literature.....  | Peck.....            | 2                  | 1                             | .....    | .....                           | .....                  |
| 34  | Cicero and Virgil.....   | Knapp.....           | 3                  | 6                             | .....    | 2                               | .....                  |
| 35  | Roman Tragedy and Seneca.....  | Knapp.....           | 2                  | 3                             | .....    | .....                           | .....                  |
|     |  |                      |                    | Deduction for repetition..... |          |                                 |                        |
|     |  |                      |                    | Total number of students..... |          |                                 |                        |
|     |  |                      |                    | 196                           |          |                                 |                        |
|     |  |                      |                    | 19                            |          |                                 |                        |
|     |  |                      |                    | 177                           |          |                                 |                        |

\* Given at Columbia.

## DEPARTMENT OF MATHEMATICS

| No. | Title of Course                                    | Instructors        | Hours<br>a<br>week | Students |          |                                 |                               |
|-----|--|--------------------|--------------------|----------|----------|---------------------------------|-------------------------------|
|     |  |                    |                    | A.B.     | Specials | Teachers<br>College<br>Students | University<br>Students        |
| A   | Geometry, Algebra, and Trigonometry.....           | Kasner, Andrews... | 3                  | 91       | 7        | 3                               | .....                         |
| 1   | Algebra, Trigonometry and Analytical Geometry..... | Kasner.....        | { 1st hf. yr.<br>3 | 16       | .....    | 2                               | .....                         |
| 2   | Analytical Geometry.....                           | Kasner.....        | { 3d hf. yr.<br>3  | 17       | .....    | 2                               | .....                         |
| 6   | Calculus.....                                      | Cole.....          | 3                  | 8        | .....    | .....                           | .....                         |
| 7   | Differential Equations.....                        | Kasner.....        | 3                  | 2        | .....    | .....                           | .....                         |
| 8   | Advanced Analytical Geometry.....                  | Andrews.....       | 3                  | 5        | .....    | .....                           | .....                         |
|     |  |                    |                    |          |          |                                 | 1                             |
|     |  |                    |                    |          |          |                                 | 3                             |
|     |  |                    |                    |          |          |                                 | 5                             |
|     |  |                    |                    |          |          |                                 | 154                           |
|     |  |                    |                    |          |          |                                 | 25                            |
|     |  |                    |                    |          |          |                                 | 129                           |
|     |  |                    |                    |          |          |                                 | Deduction for repetition..... |
|     |  |                    |                    |          |          |                                 | Total number of students..... |

## DEPARTMENT OF MUSIC

| No. | Title of Course             | Instructors    | Hours<br>a<br>week | Students |                    |                    |                               |
|-----|-----------------------------|----------------|--------------------|----------|--------------------|--------------------|-------------------------------|
|     |                             |                |                    | A.B.     | College<br>Special | Musico<br>Students | Total                         |
| *1  | General Musical Course..... | MacDowell..... | 1                  | 10       | 3                  | 15                 | 28                            |
| *2  | General Musical Course..... | MacDowell..... | 1                  | .....    | 1                  | 4                  | 5                             |
| *3  | Harmony.....                | McWhood.....   | 2                  | 9        | 1                  | 13                 | 22                            |
| *4  | Counterpoint.....           | MacDowell..... | 2                  | .....    | 1                  | 7                  | 8                             |
| *6  | Musical Dictation.....      | McWhood.....   | 1                  | 6        | 3                  | 7                  | 16                            |
| *7  | Practical Composition.....  | MacDowell..... | 1                  | .....    | 1                  | 10                 | 11                            |
| *10 | Musical Dictation.....      | McWhood.....   | 1                  | .....    | .....              | 6                  | 6                             |
| *11 | Free Composition.....       | MacDowell..... | 1                  | .....    | .....              | 2                  | 2                             |
|     |                             |                |                    |          |                    |                    | 98                            |
|     |                             |                |                    |          |                    |                    | 46                            |
|     |                             |                |                    |          |                    |                    | Deduction for repetition..... |
|     |                             |                |                    |          |                    |                    | Total number of students..... |

\*Given at Columbia.

## DEPARTMENTS OF PHILOSOPHY AND PSYCHOLOGY

| No.                        | Title of Course   | Instructors   | Hours<br>a<br>week | Students                   |          |                                 |
|----------------------------|---|---|--------------------|----------------------------|----------|---------------------------------|
|                            |   |   |                    | A.B.                       | Specials | Teachers<br>College<br>Students |
| Philoso-<br>phy<br>*1      |   |   |                    | 25                         | 1        | 26                              |
| *5                         | Historical and Critical Introduction<br>to Philosophy.....                            | Butler, Jones.....  | 3                  | 6                          | .....    | 6                               |
| *8                         | Practical Ethics.....   | Hyslop.....   | 3                  | 3                          | .....    | 3                               |
| *9                         | Principles and Problems of Esthetics..  | Jones.....  | 2 or 3             | 5                          | .....    | 5                               |
| *11                        | Logic and Scientific Method.....  | Lord.....   | { 1st hl. yr.      |                            | .....    |                                 |
|                            | Studies in European Philosophy from<br>the Renaissance to the Enlighten-<br>ment..... | Jones.....  | 2                  | .....                      | 1        | 1                               |
| *12                        | Practicum on Selected Topic in Modern<br>Philosophy.....                              | Butler.....   | 2                  | 2                          | .....    | 2                               |
|                            |   |   |                    | Deduction for repetition.. |          |                                 |
|                            |   |   |                    | Total number of students.  |          |                                 |
|                            |   |   |                    | 43                         |          |                                 |
|                            |   |   |                    | 6                          |          |                                 |
|                            |   |   |                    | 37                         |          |                                 |
| Psy-<br>chology<br>A<br>*1 |   |   |                    | 41                         | 7        | 1                               |
|                            | Elements of Psychology.....   | Lord.....   | { 2d hl. yr.       |                            |          |                                 |
|                            | Introduction to the Study of Psy-<br>chology.....                                     | Butler, Cattell, Starr,<br>Hyslop, Boas,<br>Farrand, Thorn-<br>dike, and Strong.. | 2                  | 4                          | .....    | 4                               |
|                            |   |   |                    | Total number of students.. |          |                                 |
|                            |   |   |                    | 53                         |          |                                 |

\* Given at Columbia.

| Anthropology<br>#1 | General Introductory Course.....            | Boas, Farrand.....   | 2         | 11                         | ..... | 11 |
|--------------------|---|----------------------|-----------|----------------------------|-------|----|
| Education<br>#1    |   |                      |           | Total number of students.. |       | 11 |
| #1                 | History of Education.....                   | Monroe.....          | 2 or 3    | 18                         | ..... | 18 |
| #2                 | Principles of Education.....                | Butler, Updegraff..  | 2 or 3    | 22                         | ..... | 22 |
| #3                 | Applications of Psychology in Teaching..... | McMurry.....         | 3         | 6                          | ..... | 6  |
| #4                 | Critic Work and Practice-Teaching.....      | McMurry, Wohlfarth   | 2 or more | 1                          | ..... | 1  |
| #8                 | Secondary Education.....                    | Monroe.....          | 2         | 12                         | ..... | 12 |
| #9                 | Child Study.....                            | Thorndike.....       | 2         | 1                          | ..... | 1  |
| #12                | Biology.....                                | Lloyd, Bigelow.....  | 2         | 1                          | ..... | 1  |
| #13                | English.....                                | Baker.....           | 2         | 8                          | ..... | 8  |
| #17                | German.....                                 | Bagster-Collins..... | 2         | 1                          | ..... | 1  |
| #18                | Greek Teachers' Course.....                 | Lodge.....           | 2         | 6                          | ..... | 6  |
| #19                | History.....                                | Castle.....          | 2         | 5                          | ..... | 5  |
| #21                | Latin Teachers' Course.....                 | Lodge.....           | 2         | 6                          | ..... | 6  |
| #23                | Mathematics.....                            | Bikle.....           | 2         | 5                          | ..... | 5  |
| #25                | Physical Science.....                       | Woodhull.....        | 2         | 1                          | ..... | 1  |
|                    |   |                      |           | Deduction for repetition.. |       | 93 |
|                    |   |                      |           | Total number of students.. |       | 54 |
|                    |   |                      |           |                            |       | 39 |

\* Given at Columbia.

† Given at Teachers College.

## DEPARTMENT OF PHYSICS

| No. | Title of Course                                 | Instructors  | Hours<br>a<br>week | Students                      |          |                                 |                        |
|-----|---|--------------|--------------------|-------------------------------|----------|---------------------------------|------------------------|
|     |   |              |                    | A.B.                          | Specials | Teachers<br>College<br>Students | University<br>Students |
| 1   | Light and Heat; Sound and Elec-<br>tricity..... | Day.....     | 3                  | 27                            | 2        | 1                               | .....                  |
| 2   | Electricity; Sound.....                         | Day.....     | 3 or 5             | .....                         | .....    | .....                           | 1                      |
| 4   | Light; Heat.....                                | Hallock..... | 4 or 5             | .....                         | .....    | .....                           | 1                      |
|     |   |              |                    | Deduction for repetition..... |          |                                 |                        |
|     |   |              |                    | Total number of students..... |          |                                 |                        |
|     |   |              |                    | 32                            |          |                                 |                        |
|     |   |              |                    | 1                             |          |                                 |                        |
|     |   |              |                    | 31                            |          |                                 |                        |

## DEPARTMENT OF ROMANCE LANGUAGES AND LITERATURES

| No.            | Title of Course  | Instructors           | Hours<br>a<br>week | Students                      |          |                                 |                        |       |     |
|----------------|--|-----------------------|--------------------|-------------------------------|----------|---------------------------------|------------------------|-------|-----|
|                |  |                       |                    | A.B.                          | Specials | Teachers<br>College<br>Students | University<br>Students | Total |     |
| <b>French</b>  |  |                       |                    |                               |          |                                 |                        |       |     |
| A              | Elementary Course.....   | Nitze.....            | 3                  | 23                            | 2        | .....                           | .....                  | 25    |     |
| 1              | Grammar, Reading and Com-<br>position.....                     | Loiseaux.....         | 3                  | 38                            | 4        | 5                               | .....                  | 37    |     |
| 2              | General Introduction to the<br>Study of French Literature..    | Jordan.....           | 3                  | 26                            | 3        | .....                           | .....                  | 29    |     |
| 4              | History of French Literature in<br>the 17th Century.....       | Béziat de Bordes..... | 2                  | 9                             | 2        | 2                               | .....                  | 13    |     |
| 5              | History of French Literature in<br>the 18th Century.....       | Bargy.....            | 3                  | 6                             | .....    | 2                               | .....                  | 8     |     |
| 7              | Literary Movement during the<br>first half of the 19th Century | Bargy.....            | 2                  | 5                             | 1        | .....                           | 1                      | 7     |     |
|                |  |                       |                    | Deduction for repetition..... |          |                                 |                        |       | 109 |
|                |  |                       |                    | Total number of students..... |          |                                 |                        |       | 1   |
|                |  |                       |                    |                               |          |                                 |                        |       | 108 |
| <b>Italian</b> |  |                       |                    |                               |          |                                 |                        |       |     |
| 1              | Elementary Course.....   | Speranza.....         | 3                  | 16                            | 3        | .....                           | 1                      | 20    |     |
| 2              | Italian Literature of the 16th<br>Century.....                 | Speranza.....         | 3                  | 7                             | .....    | .....                           | 1                      | 8     |     |
| *4             | Critical Study of Dante's Divina<br>Commedia.....              | Speranza.....         | 2                  | 3                             | .....    | .....                           | .....                  | 3     |     |
|                |  |                       |                    | Total number of students..... |          |                                 |                        |       | 31  |

\* Given at Columbia.



## DEPARTMENT OF ZOOLOGY

| No. | Title of Course  | Instructors                   | Hours<br>a<br>week | Students                      |          |                                 |                        |
|-----|--|-------------------------------|--------------------|-------------------------------|----------|---------------------------------|------------------------|
|     |  |                               |                    | A.B.                          | Specials | Teachers<br>College<br>Students | University<br>Students |
| 2   | Elementary Biology.....                                | Crampton, Watter-<br>son..... | 4 or 6             | 12                            | 2        | .....                           | .....                  |
| 3   | General Zoology.....                                   | Crampton.....                 | 6                  | 5                             | .....    | 1                               | 2                      |
|     | Laboratory Work in Graduate<br>Courses in Zoology..... | .....                         | .....              | .....                         | .....    | .....                           | 5                      |
|     |  |                               |                    | Total number of students..... |          |                                 |                        |
|     |  |                               |                    |                               |          |                                 | 27                     |

The Herrman Botanical Prize of \$50, which is open to all undergraduate students, was won this year by Marie Louise Wehncke, of the Senior Class.

Prizes,  
Honors,  
Scholar-  
ships

The Kohn Mathematical Prize of \$50 was given to Edith Berry of the Senior Class.

Honors were conferred as follows:

SOPHOMORE HONORS

*English:* Helen Louise Cohen  
*Mathematics:* Marion Elizabeth Latham

JUNIOR HONORS

*Classics:* Ada Blanche Clouse Neiswender  
*Mathematics:* Grace Malvina Peters

FINAL HONORS

*Classics:* { Lisa Delavan Bloodgood  
Helen Elizabeth Catlin  
Bessie May Osborn  
*Mathematics:* { Elizabeth Allen  
Edith Berry

The founded scholarships, and for this year three of the Brooklyn Scholarships, were awarded, together with the Students' Scholarships, for a combination of need and merit, as follows:

Full Scholarships to

|                 |       |
|-----------------|-------|
| Seniors.....    | 8     |
| Juniors.....    | 2     |
| Sophomores..... | 5     |
| Freshmen.....   | 2     |
|                 | <hr/> |
|                 | 17    |

Half Scholarships to

|                 |       |
|-----------------|-------|
| Seniors.....    | 3     |
| Juniors.....    | 2     |
| Sophomores..... | 2     |
| Freshmen.....   | 1     |
|                 | <hr/> |
|                 | 8     |

The honor scholarships were held for the year by the following-named students:

|   |  |
|---|--|
| Trustees' Competitive Scholarship . . . . . | Dora Russell Nevins<br>(Brooklyn Girls' High School)           |
| Lucille Pulitzer Scholarship . . . . .      | Helen Louise King<br>(Wadleigh High School,<br>New York City)  |
| Brooklyn Scholarships (series of '97-'98)   | Helen Maria Wright<br>(Brooklyn Girls' High School)            |
| “ “ ( “ '98-'99)                            | Ada Blanche Clouse Neiswender<br>(Brooklyn Girls' High School) |
| “ “ “ “                                     | Grace Malvina Peters<br>(Brooklyn Girls' High School)          |
| “ “ “ “                                     | Jeannette Rowland Seibert<br>(Brooklyn Girls' High School)     |
| “ “ ( “ '99-1900)                           | Mary Fredericka Harrison<br>(Brooklyn Girls' High School)      |
| “ “ “ “                                     | May Amerman Johnson<br>(Brooklyn Girls' High School)           |
| “ “ “ “                                     | Madeleine Dayrell Skinner<br>(Packer Collegiate Institute)     |
| “ “ ( “ 1900-'01)                           | Dora Russell Nevins<br>(Brooklyn Girls' High School)           |
| “ “ “ “                                     | Florence Eddy Hubbard<br>(Pratt Institute High School)         |

In addition to the scholarships already mentioned, the generosity of Mrs. Frederic Lee provided for a Barnard College Scholarship for the summer course in the Marine Biological Laboratory at Wood's Holl, Mass. On recommendation from the biological department, Miss Margaret E. Clark, of the Junior Class, was appointed Barnard Scholar to take advantage of this opportunity for the summer of 1901.

It is pleasant to record the expression of interest in the College and its work for New York students which has come from various preparatory schools during the year. The example set by the *alumnæ* of Miss Anne Brown's School, Mile. Veltin's School, and the Brearley School has been followed by the *alumnæ* of the Peebles and Thompson School, Misses Graham's and Miss Chisholm's Schools. In some cases the privilege is reserved for a representative of the school offering the scholarship; in other cases, in order to serve the most worthy girl, the aid is given most generously upon the sole consideration of merit and need, irrespective of the school which the student has previously attended.

Around Fiske Hall has increasingly centred the social life of the College, and a loyal college spirit is developing in a most gratifying way. This college unity is easy College to acquire in a country college; it can only be Life developed in city surroundings at the expense of much thought and effort. It is this exchange of stimulating thought and unselfish courtesies which produces the clear judgments, the sense of public responsibility, and the finer womanly qualities, which are the ultimate object of true education. It is a cause of deep regret that Fiske Hall must be given up as a social centre at the expiration of another year, and must revert to its original purpose of a science building. Certainly some friend, who appreciates the potency of a democratic social life as an agent in education, will provide against any decline of the pleasant social relations already developed.

One hundred and sixty-four candidates were examined in June, 1901, of whom fifty-one presented themselves for preliminaries only, and one hundred and thirteen for full and final examinations.

The Trustees' Competitive Scholarship was awarded to Isabelle Mott, of the Peter Cooper High School in New York City, for the best entrance examination in all subjects in June.

The Brooklyn Scholarships of the series of 1901-1902, offered to Brooklyn students for the best entrance examinations in June, have been awarded to Sallie Faulkner Fletcher, of the Erasmus Hall High School; Emilie Josephine Hutchinson, of the Erasmus Hall High School; Anna Josephine Kennedy, of the Brooklyn Girls' High School.

In so far as my limited observation warrants a general statement, I take pleasure in recording the close of a successful year of work. It has closed with full co-operation and confidence between teachers and students, with high ideals prevailing in the college life, and with every prospect of greater effectiveness and accomplishment in the year to come.

Respectfully submitted,

LAURA D. GILL,

*Dean.*

# TEACHERS COLLEGE

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## REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1901

*To the President of Columbia University  
in the City of New York:*

SIR:

I have the honor to submit the following report of the work of Teachers College for the academic year 1900-1901.

In the appendix to this report will be found supplementary reports from the Superintendent of Schools, the Librarian, the Registrar, and the Treasurer.\* The statistics given in these reports are highly encouraging, inasmuch as they show steady progress in all departments, and a decided advance in the professional ability and scholarship of our **Statistics** students. The total enrollment in the College **of Attend-** has been 593 students, an increase of 33 % over **ance** last year, and of this number 180 are college graduates and 148 normal-school graduates—an increase of 80 % and 56 % respectively. The number of institutions represented has been 82 colleges and universities and 51 normal and training schools, as against 66 colleges and 41 normal schools last year and 58 colleges and 21 normal schools in 1898-99. It is especially significant that an increasing number of college graduates have registered in undergraduate courses. The 87 candidates for the Higher Diploma and the 70 candidates for the Secondary Diploma are all college graduates or persons of equivalent academic training. Besides

\* Printed only in the separate edition of the Report of the Dean of Teachers College.

these, 6 candidates for the Elementary Diploma, 1 candidate for the Kindergarten Diploma, 3 candidates for the Domestic Science Diploma, 2 candidates for the Fine Arts Diploma, and 1 candidate for the Manual Training Diploma held degrees from other institutions. Moreover, 67 students have been admitted to advanced standing in our undergraduate courses on evidence of a partial course in some recognized college.

The total class registration in regular college courses has been 2438, as against 2006 in the previous year. The general courses in Education show the most remarkable **Class Reg-** gain—48 % of the whole. The departments which **istration** have developed most rapidly during the year are Domestic Science, Domestic Art, English, Manual Training, and Fine Arts. English is properly a popular subject, and it would seem that the exceptional advantages offered in the technical departments are beginning to be appreciated. Such comparison of departments, however, is misleading, inas- much as the general academic work which is prerequisite to the professional courses is in several instances either carried on in other departments of the University or required for ad- mission to Teachers College. This is notably true in Latin, Greek, French, German, and Mathematics. It has been found necessary, however, to offer Freshman courses in French, German, and Mathematics; it is possible, also, that Sophomore sections will soon be required in these subjects, and that certain courses of a semi-professional character will be found necessary in the department of Latin and Greek. It is the settled policy of the Faculty to offer no academic course in Teachers College which unnecessarily duplicates a course in another department of the University, but when there is a sufficient number of our own students to form a separate section in any regular course, it is both more econom- ical and more satisfactory to have that section instructed in Teachers College than elsewhere. Such an arrangement in no sense duplicates courses given in other departments of the University; it merely increases the number of sections in a given course and permits students who have a common pur- pose to receive instruction suited to their needs.

The influence of the College is best shown in the number and character of the positions accepted by its students. In my last report a summary was given of 115 appointments for the fifteen months ending September 15, 1900. During the twelve months ending September 15, 1901, the number of positions to which our students have been appointed or to which they have returned after leave of absence is 127, distributed as follows: colleges and universities, 11; normal schools, 9; superintendent of public schools, 1; supervisors and special teachers, 19; secondary schools, 42; elementary schools, 27; kindergartens, 7; other positions, 11. The Teachers College Committee has received direct applications for 320 teachers, not counting many inquiries received by members of the Faculty and teaching staff. The demand for able teachers in the high school and lower grades is constant, and those who are thoroughly trained have no difficulty in securing desirable positions, but the most insistent call which comes to us is for teachers in normal schools, for supervisors and primary teachers, and for special teachers of domestic economy and manual training. In these lines the demand has far outrun the supply. The amount of correspondence with school officials in all parts of the country relative to teachers and educational problems has greatly increased during the year, and has now assumed such proportions as to necessitate some change in our method of handling it. The welfare of the College and of the profession which we represent requires that it be done carefully and systematically. The additional office room provided for next year will greatly facilitate the conduct of all administrative business.

Next in importance to the teachers whom we send out is the influence exerted by the publications of the College. Several of our professors have brought out works of great value for educational purposes—notably Woodhull's *Text-Book on Physics* and *Laboratory Manuals in Physics and Chemistry*, Dodge's *Reader in Physical Geography* and (editor) *The Journal of School Geography*,

McMurry's *School Geographies*, Lodge's *Lexicon of Plantus*, and Thorndike's *Human Nature Club*. The current volume of the *Teachers College Record* has had a wide circulation, and our courses of study given therein have been adopted entire or in part in many cities. Since my last report the following numbers have been published:

Vol. I, No. 4.—September, 1900.

*Syllabi of Teachers College Courses: History of Education.* Paul Monroe.

*Principles of Education.* Nicholas Murray Butler.

*School Administration.* Samuel T. Dutton.

*National Educational Systems.* James E. Russell.

Vol. I, No. 5.—November, 1900.

*Hand Work in the Horace Mann School: Fine Arts.* Alfred V. Churchill.

*Domestic Art.* Mary S. Woolman.

*Domestic Science.* Helen Kinne.

*Manual Training.* Charles R. Richards.

Vol. II, No. 1.—January, 1901.

*Biology in the Horace Mann High School.* F. E. Lloyd and M. A. Bigelow.

Vol. II, No. 2.—March, 1901.

*Geography in the Horace Mann School.* Richard E. Dodge.

Vol. II, No. 3.—May, 1901.

*Child Study. Sources of Materials and Syllabi of College Courses.* Edward L. Thorndike.

The influence of the College in public education is peculiarly shown in another way. As a result of a tour through certain Southern States, under the leadership of Mr. Robert C. Ogden, several special scholarships have been established in Teachers College for the year 1901-1902 for the assistance of Southern teachers. These scholarships are of the value of \$500 each, an amount deemed sufficient to pay all necessary expenses for a year of resident study. One of these scholarships is given by Mr. John Crosby Brown, one by Mr. V. Everit Macy, two by Mr. George Foster Peabody, and three by Mr. John D. Rockefeller. Two scholarships, in addition to the above, are tentatively offered by



Mr. Rockefeller on condition that they be awarded only in the event of strong candidates presenting themselves in excess of the number already provided for. By request of the donors one scholarship will be given preferably to a resident of North Carolina, one to a resident of Georgia, one to a graduate of the Peabody Normal College, Tennessee, one to a graduate of Spelman Seminary, Georgia, one to a graduate of Tuskegee, Alabama, and one to a graduate of Hampton Institute, Virginia. The others are open to residents of any Southern State. No distinction of race or sex will be considered in making the awards, but in the announcement it has been stated that it is desirable, other things being equal, that (1) appointees should be graduates of a college or normal school who have had successful experience in teaching, and that (2) they give promise of becoming able principals or superintendents of schools or teachers in normal schools. In order that we might have the assistance of educators who are familiar with the needs and conditions of the South, committees have been appointed representing the several institutions or States which have been given a preference by the donors of certain scholarships. Although the announcement was not made till late in June, after teachers are expected to have made engagements for the ensuing year, a large number of applications have been received from individuals, and in several instances from institutions and city school systems, which are anxious to have the benefit of such opportunity through a teacher to whom a leave of absence will be granted. From present indications the donors of these scholarships may be well assured that their gifts will go to worthy and able persons, who will earnestly devote themselves to the cause of education in the South.

Few changes have been made during the year in the professional courses of study. The requirements for the **Higher Courses** Diploma have been materially increased. **Candidates of Study** must pursue their studies for a minimum period of one year, after having satisfactorily completed Education 1, 2, and 4 in Teachers College, or substantially equivalent courses in an approved college or university. In effect this requirement increases the period of residence from

one year, as heretofore required, to two years. I shall present to the Faculty for their consideration during the **Higher** ensuing year a proposition looking to the requir- **Diploma** ing of an undergraduate diploma from Teachers College or its equivalent from some other approved professional school, as an essential prerequisite to candidacy for the **Higher** Diploma. Such a requirement will be welcome, I think, to many students who wish to secure the highest testimonial of their professional ability, and would give candidates for the Ph.D. degree the opportunity to pursue professional studies throughout their course.

The regulations governing the Secondary Diploma have not been changed, but it is becoming more apparent each year that Seniors in Columbia and Barnard are **Secondary** hard pressed to meet the requirements for both **Diploma** the A.B. degree and the diploma. The work is planned primarily for graduate students who take 8 or 10 hours a week, but Seniors who enter the course are required to take 15 hours for the A.B. degree. Hence the strain upon the younger students and the difficulty of fitting the two schedules in working order. If it is worth while to accept Seniors as candidates for this diploma, some plan should be devised to equalize the requirements of the Seniors and the graduate students.

No considerable change has been made in the undergraduate professional courses. A two-years' course leading to a diploma in Music has been established, with the **Course** in co-operation of the University Department of **Music** Music. The requirements for admission are the same as to other departmental courses. The prescribed subjects are as follows:

## FIRST YEAR

|                        |   |
|------------------------|---|
| Prescribed (10 points) | Psychology A—Elements of psychology—1½    |
|                        | points                                    |
|                        | Education 3—Applications of psychology in |
|                        | teaching—1½ points                        |
|                        | Music 1—Sight singing—2 points            |
|                        | Music 1c*—General music course—1 point    |
|                        | Music 3c—Harmony—2 points                 |
|                        | Music 4—Voice culture—2 points            |
| Elective (5-8 points)  |   |

\* Courses offered in Columbia College are marked "c".

## SECOND YEAR

|                        |  |
|------------------------|--|
| Prescribed (12 points) | Education 1—History of education—3 points                          |
|                        | Education 43—Theory and practice of teaching school music—2 points |
|                        | Music 2—Sight singing—2 points                                     |
|                        | Music 3—Musical art—1 point  |
|                        | Music 2c—General music course—1 point                              |
|                        | Music 7c—Musical seminar—1 point                                   |
| Elective (3-6 points)  | Music 5—Voice culture—2 points                                     |
|                        |  |

The most important legislation of the year is the re-organization of the Collegiate Course and the provision for the degree of Bachelor of Science, which is granted by the Trustees of the University on the recommendation of the Faculty of Teachers College. In my last report I referred to the need of such a degree for Teachers College students, who prefer to direct their studies towards teaching in kindergartens and elementary schools, and expressed the hope that the University Council would recommend some suitable reward for those who successfully completed a four-years' course of academic and professional study in advance of the secondary school. This hope has been realized in a most satisfactory manner. The regulations provide that the course leading to the degree of Bachelor of Science shall include (1) the subjects of the Teachers College Collegiate Course or their equivalent in an approved institution of learning, and also (2) a two-years' professional course leading to a College diploma. Candidates for the degree of B.S. are advised to elect such subjects during the professional course that not more than sixteen points shall be devoted to courses in the Department of Education.

Students in the Collegiate Course are required to take courses amounting in all to thirty points for the two years of residence. The courses necessary to meet these requirements may be chosen by the student at will from the courses announced each year, subject to the approval of the standing committee of the Faculty and to the following general regulations:

## PRESCRIBED:

(a) For all students:

English 1—Composition and Literature—3 points

English 2—Composition and Literature—2 points

History 1—Mediæval and Modern—3 points

(b) For students who do not offer the following subjects at entrance, the courses appearing in connection with them (unless a more advanced course in the same department is elected), respectively:

## ENTRANCE SUBJECTS:

## COLLEGE COURSES:

1—German.....German A—3 points

2—French.....French A—3 points or German 2—3 points

3—Advanced Mathematics.....Mathematics A—3 points

4—Freehand Drawing.....Fine Arts 1—2 points

Also four of the courses following unless offered at entrance:

5—Chemistry.....Physical Science 1—2 points

6—Physics.....Physical Science 2—2 points

7—Botany.....Biology 1—2 points

8—Zoölogy.....Biology 2—2 points

9—Physiography.....Geography 6—2 points

Students will not be permitted to take courses in any one department amounting to a credit of more than six points in any year.

The granting of a university degree to students of Teachers College seems to me to be the most important step in the recent development of the College. The University recognizes our courses as worthy of full collegiate honors, and places its approval upon professional courses for teachers in the same manner as upon courses leading to other learned professions. It is an evidence, too, of the liberality and breadth of Columbia, inasmuch as no such distinction has been accorded to the teaching profession, to my knowledge, in any other modern university.

The rapid growth of the College and its Schools has necessitated several additions to the teaching staff. The adoption of the new statutes increased the Faculty at the beginning of the year by three adjunct professors, and Professors Farnsworth and Thorndike have since been added by promotion. Provision was made in the budget for 1901-02 for two new professorships. These

positions have been most satisfactorily filled by the appointment of David Eugene Smith, Ph.D., to the professorship in Mathematics, and of Thomas Denison Wood, M.D., to the professorship in Physical Education.

Professor Smith is a graduate of Syracuse University, and has had practical experience in the training of teachers in the Cortland (N. Y.) State Normal School, the State Normal College, Ypsilanti, Mich., and as Principal of the State Normal School, Brockport, N. Y. He is known to be a skilful teacher and an able scholar. He has published several important school texts and works on mathematical subjects.

Professor Wood is a graduate of Oberlin College and of the College of Physicians and Surgeons, Columbia University. He had charge of the Men's Gymnasium at Oberlin for two years, and during the last ten years he has been Professor of Hygiene and Organic Training in Stanford University, California. Since May, 1900, Dr. Wood has been on leave of absence for the purpose of study and travel in Europe. He comes to us with an established reputation as a scholar and physician, whose chief interest is in physical education.

The appointment of Dr. Wood imposes upon us the obligation to develop the department of Physical Education in a manner befitting the subject which he represents.

**Department of Physical Education** Other departments, covering practically the whole round of academic and technical subjects taught in the schools, are well equipped, but in common with most Americans we have honored the educational principle, a sound mind in a sound body, more in the breach than in the observance. Yet all must realize that intellectual training without the physical ability to apply it is a waste of time, and that character-building, without a sound physical foundation, is a well-nigh impossible task. Surely no knowledge is of more practical worth than the knowledge of how to secure the greatest efficiency in the living human machine, and no training can be of greater service than that which inculcates habits of right living. Hygiene, or the art and science of health, is one of the most important studies, if not the most important in the education of any person. And yet

how sadly it is neglected! Our children grow up to manhood and womanhood in ignorance for the most part of the commonest laws of health, with pernicious habits and tastes in matters pertaining to cleanliness, mental and bodily exercise, recreation and diet, and with lamentable misconceptions of the nature of the human organism and of its highest functions. Our duty is obvious. We must see to it that every child in our Schools has the instruction best suited to his years, and that our College students are well informed on the subjects of personal and school hygiene.

School hygiene is a distinct branch of the general subject. It looks to the acquisition and maintenance of healthful conditions in school work. School life is a highly artificial product of modern civilization. It is to-day one of the most sedentary occupations in which workers are engaged, and its social significance is readily discoverable in the fact that approximately fifteen millions of children—more than one-fifth of our total population—are being influenced for good or ill by the school-room environment. Serious as are the evils of sedentary occupations in general, their disadvantages are specially emphasized in the case of growing children, who are often unduly crowded together in our public schools. Moreover, the urban tendencies of our population make it extremely difficult to secure to the young that which is essential to their physical well-being—namely, light and air and freedom of movement. But ideal conditions are hardly attainable in school life; indeed, from the physical standpoint any form of school life which involves five or six hours of close confinement daily can never be ideal. Nevertheless, the teacher should know how to make the most of the conditions imposed upon him. He should understand the physical organization of the child; the laws of heredity, growth, and development; the signs of health and disease; the construction, arrangement, and furnishing of school buildings; the principles of lighting, heating, ventilation, and sanitation; the hygiene of instruction; and the proper measures for the prevention of disease and the correction

reading-room, club rooms and rooms for sewing, cooking, and manual training, all of which will be open to the public as well as to the children of the school. A unique feature is the inclusion of living apartments for the instructors and officers, in order that the building may be open and under supervision every day and evening in the year. This school, which has been appropriately designated by the Trustees "The Speyer School," will be opened in the fall of 1902, and it should speedily become one of the most important experiment stations in the field of American education.

The removal of the Horace Mann Schools to the new building has presented some serious problems in the adaptation **Changes in** of the main building to the purposes of the College. **the College** For two years past the facilities in several of the **Building** departments have been entirely inadequate. In some instances rooms have been occupied by two and three times the number of students for which they were designed. The rearrangement gives the entire second floor to the Departments of Geography, Mathematics, and Latin and Greek, and to the Educational Museum. Because of the great increase in the number of students, extensive changes have become necessary also in the rooms devoted to Domestic Art and Science on the fourth floor of the Milbank Building. The most expensive item, however, is the enlargement of the heating plant and the installation of a new system of electric lighting. The room originally planned as an auditorium and temporarily used as a gymnasium seemed to be the most suitable location for these purposes, particularly as the space above could be utilized for a suite of administrative offices. Suitable facilities for the conduct of the College business will be heartily appreciated by those of us **Adminis-** who have lived under the strain of the last two **trative** or three years. For example, the Cashier and **Offices** his assistant have occupied one half of a room sixteen feet square, while the Registrar and her staff of from two to six assistants have had the other half. Not only has all the financial business with over 2000 students and the entire staff of teachers and employees been trans-

acted and the educational records of all College students handled in this one room, but the public telephone has been located here; and the mail received for 600 teachers and students has also been given out from the same room. The congestion in the Dean's office has been almost as disagreeable. We have been forced to use the Trustees' room both as a waiting-room and as the office for the Secretary of the College, the Dean's Secretary, two stenographers, and an assistant. We shall be grateful, therefore, for offices adapted to our several needs, and of stock rooms, which, strange to say, were nowhere provided in the old building.

The prospective growth of both College and School emphasizes the importance of having at our disposal every available foot of land on the block. We are now in pos- Gifts of session of all the lots west of the College and, thanks Land to certain far-sighted friends, we are now fairly protected on the east. In this instance we are especially indebted to Mr. D. Willis James, Mr. William E. Dodge, and three of our Trustees, who have during the year presented to the College four of the eastern lots.

The total expenditures have amounted to \$223,723.85, of which \$214,641.96 were for current expenses. The income of the College from earnings was \$140,644.98; Business from trust funds, \$8,433.51, and from receipts for Admini- designated purposes, \$297.31, leaving a deficiency tration of \$65,266.16 on account of current expenses to be made up by donations. The gifts for this purpose amounted to \$84,625, thus leaving a surplus in the general fund of \$19,358.84, out of which has been paid a city assessment of \$9,081.89 for extending 120th Street west of Broadway. The balance, \$10,276.95, has been applied to the reduction of the loan of \$14,000 which was made to close the fiscal year ending June 30, 1900. It should be noted, moreover, that the current expense account contains certain extraordinary charges which were not foreseen at the beginning of the year, thus making the total outlay of the College \$22,000 in excess of the amount contemplated in the budget.

The most encouraging feature of the Treasurer's Report



is the assurance that notwithstanding the increase in current expenses, amounting to about \$20,000 annually, the deficiency is actually less than it was four years ago. For sake of comparison I give herewith the figures for 1897-98 (omitting the account of College Hall) and those for 1900-1901.

|  | 1897-98   | 1900-01   | Increase in<br>Four Years |
|--|-----------|-----------|---------------------------|
| Total expenditures for current expenses                          | \$146,120 | \$214,641 | \$68,521—47%              |
| Income from earnings, trust funds, etc., for designated purposes | 79,730    | 149,375   | 69,645—89%                |
| Deficiency   | \$66,390  | \$65,266  | (\$1,124 less)            |
| Number of college students:                                      |           |           |                           |
| Regular  | 72        | 419       | 347—482%                  |
| Special and irregular  | 97        | 174       | 77—80%                    |
| Total  | 169       | 593       | 424—251%                  |
| Pupils in Schools  | 395       | 702       | 307—77%                   |

This means that we are conducting classes for five times the number of regular students (special students are admitted only to classes already formed) in residence four years ago, at an increase in current expenses of only 47 %; or, what is perhaps a better form of putting it, in the recent growth of the College the earning capacity has kept practically even pace with the increase in expenditures.

In looking forward to next year we have the encouragement of additional room and facilities for conducting the College work, and of ample accommodations for the Horace Mann Schools. We have also the still greater encouragement of knowing that the quality of our work is steadily improving, and that it is meeting with the hearty approbation of the public and of the teaching profession. We now have a character to maintain as well as a reputation to advance. There is no question of the ability and devotion of our teaching staff, and I believe that there will be no lack of confidence or diminution of support on the part of our friends.

Respectfully submitted,

JAMES E. RUSSELL,

*Dean of Teachers College.*

## SUMMER SESSION

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### REPORT OF THE DIRECTOR

FOR THE SESSION OF 1901

*To the President of Columbia University  
in the City of New York.*

SIR :

The following report upon the second Summer Session of Columbia University, held from July 5 to August 16, 1901, is respectfully submitted :

The steps that led up to the organization of the first Summer Session were detailed in my last annual report. The authority for the Summer Session of 1901 is **Adminis-** found in the resolution of the Trustees, passed **tration** October 1, 1900, and in a similar resolution passed by the Trustees of Teachers College. The resolution referred to read as follows :

“ Resolved, that the President have authority to make provision for a Summer Session in 1901, and thereafter until otherwise ordered, upon substantially the same basis as the Summer Session of 1900, without the guarantee.”

Immediately upon the passage of this resolution by the Trustees of the two corporations, the same Administrative Board and Director were appointed as in 1900 and the work of organization began. In pursuance of the recommendation of my last report, and for the reasons there stated, the Summer Session of 1901 has consisted of courses of instruction, or their equivalent in laboratory or field work, given five days a week for six weeks, instead of, as in 1900, on six days a week for five weeks. This arrangement has afforded

the students opportunity for needed recreation, and made possible the organization of a series of enjoyable excursions, on successive Saturdays, to the great museums of the city and to near-by points of interest.

Upon the recommendation of the Administrative Board Officers of the Summer Session, the following persons Instruction were appointed by the President to give instruction at the Summer Session of 1901 :

|   |           |
|---|-----------|
| <i>Department of Education.....</i>           | 7 courses |
| Nicholas Murray Butler, Professor             |           |
| Franklin Thomas Baker, Professor              |           |
| Paul Monroe, Professor                        |           |
| Charles Alexander McMurry, Professor          |           |
| John Angus MacVannel, Instructor              |           |
| Elizabeth Carss, Instructor                   |           |
| Naomi Norsworthy, Assistant                   |           |
| Elsie Kupfer, Assistant                       |           |
| <i>Department of English.....</i>             | 5 courses |
| George Rice Carpenter, Professor              |           |
| Abraham Valentine Williams Jackson, Professor |           |
| William Peterfield Trent, Professor           |           |
| William Tenney Brewster, Instructor           |           |
| Jeanette Bliss Gillespy, Instructor           |           |
| Louis Herbert Gray, Assistant                 |           |
| <i>Department of Fine Arts.....</i>           | 1 course  |
| George Sawyer Kellogg, Instructor             |           |
| <i>Department of German.....</i>              | 3 courses |
| William Addison Hervey, Instructor            |           |
| <i>Department of History.....</i>             | 3 courses |
| Paul Monroe, Professor                        |           |
| Harry Alonzo Cushing, Instructor              |           |
| <i>Department of Latin.....</i>               | 2 courses |
| James Chidester Egbert, Jr., Professor        |           |
| <i>Department of Manual Training.....</i>     | 2 courses |
| Charles Russell Richards, Professor           |           |
| Oswald Rudolf Eklöf, Instructor               |           |
| Lucy Hess Weiser, Instructor                  |           |

|  |           |
|--|-----------|
| <i>Department of Mathematics</i> .....       | 3 courses |
| Cassius Jackson Keyser, Instructor           |           |
| <i>Department of Philosophy</i> .....        | 3 courses |
| Nicholas Murray Butler, Professor            |           |
| John Angus MacVannel, Instructor             |           |
| Adam Leroy Jones, Instructor                 |           |
| <i>Department of Physical Training</i> ..... | 4 courses |
| Watson Lewis Savage, Director                |           |
| Jessie Hubbell Bancroft, Instructor          |           |
| Gustav Herrman Bojus, Instructor             |           |
| George Ruppert Seikel, Assistant             |           |
| Charles Holroyd, Assistant                   |           |
| Ada Frances Thayer, Assistant.               |           |
| <i>Department of Physics</i> .....           | 4 courses |
| William Hallock, Professor                   |           |
| Frank Leo Tufts, Tutor                       |           |
| <i>Department of Psychology</i> .....        | 4 courses |
| Edward Lee Thorndike, Professor              |           |
| Adam Leroy Jones, Instructor                 |           |
| William Harper Davis, Assistant              |           |
| <i>Department of Romance Languages</i> ..... | 2 courses |
| Louis Auguste Loiseaux, Instructor           |           |

With two exceptions, the instructors at the Summer Session of 1901 are present or former members of the teaching staff of the University. The two exceptions were Dr. Charles Alexander McMurry, Instructor in the State Normal School, De Kalb, Ill., and Miss Ada Frances Thayer, Supervisor of Physical Training in the Public Schools of Syracuse, N. Y.

In 1901 courses were added in Fine Arts, German, Latin, and Romance Languages. The number of courses offered in Education, History, Philosophy, Physical Training, Physics, and Psychology were increased. Courses of Botany and Geography, in which instruction was offered at the Summer Session of 1900, were not represented in 1901. The following comparative tables are of interest :

| Department        | Courses offered,<br>1900 | Total Enrollment,<br>1900 | Courses offered,<br>1901 | Total Enrollment,<br>1901 |
|-------------------|--------------------------|---------------------------|--------------------------|---------------------------|
| Botany            | 3                        | 28                        | —                        | —                         |
| Education         | 5                        | 458                       | 7                        | 495                       |
| English           | 5                        | 237                       | 5                        | 238                       |
| Fine Arts         | —                        | —                         | 1                        | 45                        |
| Geography         | 2                        | 59                        | —                        | —                         |
| German            | —                        | —                         | 3                        | 67                        |
| History           | 1                        | 15                        | 3                        | 71                        |
| Latin             | —                        | —                         | 2                        | 14                        |
| Manual Training   | 2                        | 21                        | 2                        | 44                        |
| Mathematics       | 3                        | 73                        | 3                        | 71                        |
| Philosophy        | 1                        | 24                        | 3                        | 58                        |
| Physical Training | 2                        | 42                        | 4                        | 67                        |
| Physics           | 2                        | 40                        | 4                        | 56                        |
| Psychology        | 2                        | 88                        | 4                        | 155                       |
| Romance Languages | —                        | —                         | 2                        | 20                        |
| Total             | 28                       | 1085                      | 43                       | 1401                      |

|                        | 1900 |         | 1901 |         |
|------------------------|------|---------|------|---------|
| Botany.....            | 28   | 2.58 %  | —    | —       |
| Education.....         | 458  | 42.21 % | 495  | 35.27 % |
| English.....           | 237  | 21.84 % | 238  | 16.99 % |
| Fine Arts.....         | —    | —       | 45   | 3.20 %  |
| German.....            | —    | —       | 67   | 4.77 %  |
| Geography.....         | 59   | 5.43 %  | —    | —       |
| History.....           | 15   | 1.39 %  | 71   | 5.05 %  |
| Latin.....             | —    | —       | 14   | 1.14 %  |
| Manual Training.....   | 21   | 1.94 %  | 44   | 3.13 %  |
| Mathematics.....       | 73   | 6.74 %  | 71   | 5.05 %  |
| Philosophy.....        | 24   | 2.21 %  | 58   | 4.13 %  |
| Physical Training..... | 42   | 3.87 %  | 67   | 4.77 %  |
| Physics.....           | 40   | 3.68 %  | 56   | 4.05 %  |
| Psychology.....        | 88   | 8.11 %  | 155  | 11.03 % |
| Romance Languages..    | —    | —       | 20   | 1.42 %  |
|                        | 1085 | 100.00  | 1401 | 100.00  |

It having been found by experience that two Summer Session courses are as many as one student can profitably pursue, no student at the Summer Session of 1901 was permitted to enroll for more than two courses except by special permission and for reasons of weight. That this rule is a reasonable one is shown by the fact that a number of students who gave a good reason for wishing to take a third course afterwards discontinued it, finding the work involved far too heavy.

A detailed statement of the courses of instruction, together with the registration for each course, follows :

## COURSES OF INSTRUCTION, 1901

| Instructor  | Title of Course  | Enrollment |       |       |
|---|--|------------|-------|-------|
|   |  | Men        | Women | Total |
|   | <i>Department of Education</i>                                 |            |       |       |
| Prof. Monroe  | s1b. History of Education                                      | 32         | 54    | 86    |
| Prof. Butler and Dr. MacVannel                              | s2. Principles of Education                                    | 34         | 81    | 115   |
| Dr. McMurry   | s5. General Method in Elementary Education                     | 17         | 73    | 90    |
| Dr. McMurry   | s10. Special Method in Elementary Education                    | 24         | 86    | 110   |
| Prof. Baker   | s13a. English in Secondary Schools                             | 4          | 22    | 26    |
| Prof. Baker   | s14. English in Elementary Schools                             | 8          | 30    | 38    |
| Miss Carrs  | s41. Nature Study in Elementary Schools                        | 7          | 23    | 30    |
|   |  | 126        | 369   | 495   |
|   | <i>Department of English</i>                                   |            |       |       |
| Prof. G. R. Carpenter<br>Mr. Brewster, and<br>Miss Gillespy | sA. Rhetoric and English Composition                           | 9          | 46    | 55    |
| Prof. G. R. Carpenter<br>Mr. Brewster, and<br>Miss Gillespy | sB. English Composition  | 1          | 13    | 14    |
| Prof. Jackson   | s17. Chaucer   | 11         | 14    | 25    |
| Prof. Jackson   | s19. Shakspeare  | 17         | 60    | 77    |
| Prof. Trent   | s49. English Literature in first half of Nineteenth Century    | 19         | 48    | 67    |
|   |  | 57         | 181   | 238   |
|   | <i>Department of Fine Arts</i>                                 |            |       |       |
| Mr. Kellogg   | s15. History and Interpretation of Art                         | 15         | 30    | 45    |
|   | <i>Department of German</i>                                    |            |       |       |
| Mr. Hervey  | sA. Elementary course  | 15         | 19    | 34    |
| Mr. Hervey  | s2. Intermediate course  | 10         | 9     | 19    |
| Mr. Hervey  | s3. Literary course  | 5          | 9     | 14    |
|   |  | 30         | 37    | 67    |
|   | <i>Department of History</i>                                   |            |       |       |
| Prof. Monroe  | s1a. Development of Mediæval Civilization                      | 7          | 14    | 21    |
| Dr. Cushing   | s3. English History, especially from 1660 to 1714              | 4          | 16    | 20    |
| Dr. Cushing   | s4. History of the United States, especially from 1770 to 1790 | 2          | 28    | 30    |
|   |  | 13         | 58    | 71    |

| Instructor   | Title of Course  | Enrollment |       |       |
|--|--|------------|-------|-------|
|  |  | Men        | Women | Total |
|  | <i>Department of Latin</i>   |            |       |       |
| Prof. Egbert                                       | s1. <i>Satires</i> of Juvenal: Roman life  | 6          | 3     | 9     |
| Prof. Egbert                                       | s2. Roman Historical Readings: The <i>Annals</i> of Tacitus                      | 3          | 2     | 5     |
|  |  | 9          | 5     | 14    |
|  | <i>Department of Manual Training</i>   |            |       |       |
| Miss Weiser  | s1. Manual Training for lower grades   | 2          | 23    | 25    |
| Mr. Eklöf  | s2. Wood-working for elementary schools  | 12         | 7     | 19    |
|  |  | 14         | 30    | 44    |
|  | <i>Department of Mathematics</i>   |            |       |       |
| Mr. Keyser   | s1. Logarithms and Trigonometry  | 13         | 14    | 27    |
| Mr. Keyser   | s2. Advanced Algebra   | 12         | 17    | 29    |
| Mr. Keyser   | s6. Differential and Integral Calculus   | 14         | 1     | 15    |
|  |  | 39         | 32    | 71    |
|  | <i>Department of Philosophy</i>  |            |       |       |
| Prof. Butler and Dr. MacVannel                     | s1. Introduction to Philosophy   | 5          | 4     | 9     |
| Dr. Jones  | s9. Logic: Deductive and Inductive   | 7          | 31    | 38    |
| Prof. Butler and Dr. MacVannel                     | s12. Philosophical Practicum   | 6          | 5     | 11    |
|  |  | 18         | 40    | 58    |
|  | <i>Department of Physical Training</i>   |            |       |       |
| Dr. Savage and Miss Bancroft                       | s1a. Physical Training for Elementary Schools: free gymnastics                   | —          | 11    | 11    |
| Dr. Savage and Miss Bancroft                       | s1b. Physical Training for Elementary Schools: games, light-apparatus gymnastics | —          | 16    | 16    |
| Dr. Savage, Mr. Bojus, Mr. Seikel, and Mr. Holroyd | s2a. Practical Gymnastics: elementary course                                     | 8          | 22    | 30    |
| Dr. Savage, Mr. Bojus, Mr. Seikel, and Mr. Holroyd | s2b. Practical Gymnastics: advanced course                                       | 3          | 7     | 10    |
|  |  | 11         | 56    | 67    |

| Instructor   | Title of Course                               | Enrollment |       |       |
|--|---|------------|-------|-------|
|  |   | Men        | Women | Total |
| <i>Department of Physics</i>   |   |            |       |       |
| Prof. Hallock and Dr. Tufts  | s1. General Physics                           | 10         | 5     | 15    |
| Prof. Hallock and Dr. Tufts  | s1a. Laboratory course in General Physics     | 18         | 3     | 21    |
| Prof. Hallock and Dr. Tufts  | s1b. Laboratory methods                       | 8          | 7     | 15    |
| Prof. Hallock and Dr. Tufts  | Research Course                               | 4          | 1     | 5     |
|  |   | 40         | 16    | 56    |
| <i>Department of Psychology</i>  |   |            |       |       |
| Dr. Jones  | sA. Elements of Psychology                    | 16         | 67    | 83    |
| Dr. Thorndike  | s2. Experimental Psychology                   | 17         | 21    | 38    |
| Dr. Thorndike  | s11. Genetic Psychology                       | 18         | 14    | 32    |
| Dr. Thorndike  | Research Course                               | 2          | —     | 2     |
|  |   | 53         | 102   | 155   |
| <i>Department of Romance Languages</i>                                     |   |            |       |       |
| <i>French</i>  |   |            |       |       |
| Mr. Loiseaux   | s2. General Introduction to French Literature | 2          | 10    | 12    |
| <i>Spanish</i>   |   |            |       |       |
| Mr. Loiseaux   | s1. Elementary course                         | 3          | 5     | 8     |
|  |   | 5          | 15    | 20    |
| Total number of students receiving instruction in the several courses..... |   | 430        | 971   | 1401  |

The instructors are most emphatic in repeating the statements made of the student-body of 1900, that the men and women registered at the Summer Session are an unusually earnest and intelligent body of students. A large majority of them have come to the University with a very definite purpose in view, and they apply themselves assiduously to the courses which they have chosen. It has been a matter of common remark by both instructors and students, that the amount of academic credit attached to work done at the Summer Session is too small, the fact being that the amount of benefit and training acquired from a Summer Session course, pursued daily for thirty days, is far in excess of that which results from a



course of instruction given one hour a week throughout the usual academic year.

The Summer Session is based upon a totally different theory of instruction from that which prevails during the usual academic year, and it is possible, therefore, to compare or contrast the two theories and their results. At the Summer Session the energy of the student is concentrated upon a specific field of study for a short time. During the usual academic year the attention of the student is divided between several unrelated studies for a much longer period. It can hardly be doubted that each system of study has advantages of its own, and that that university is fortunate which so well adapts itself to the needs of the individual student as to offer ample opportunity for him to carry on his studies in part by one method, and in part by another.

The total number of students enrolled at the Summer Session of 1901 was 580,\* a gain of 163, or 39%, over the registration of 1900. The enrollment upon the several courses of instruction is shown in the table given above. The total number of teaching units was 1401, the teaching unit being one student enrolled in one course. The average number of courses taken per student was, therefore, 2.4, as compared with 2.6 in 1900.

The following table shows the number of students taking one, two, three, four, and five courses, respectively. Inasmuch as the course in Fine Arts and some of the courses in Physical Training were not included in the restriction as to two courses, and as these courses were taken by many students, the number of students returned as taking three or more courses is considerably larger than the number who asked for and received permission to take a third course:

|                               |       |       |
|-------------------------------|-------|-------|
| Students taking 1 course..... | 41    | 41    |
| “ “ 2 courses.....            | 281   | 562   |
| “ “ 3 “.....                  | 232   | 696   |
| “ “ 4 “.....                  | 23    | 92    |
| “ “ 5 “.....                  | 2     | 10    |
|                               | <hr/> | <hr/> |
|                               | 579   | 1401  |

\* The following tables show a total registration of 579, since one student who paid the fees failed to register.

The previous academic training of the student-body at the Summer Session is shown in the following table :

|   | Graduates<br>of |        | Partial<br>Courses in |        | Total |         |
|---|-----------------|--------|-----------------------|--------|-------|---------|
| Colleges                                  | 152             | 26.16% | 53                    | 2.19%  | 205   | 35.28%  |
| Professional Schools<br>for Teachers      | 216             | 37.52% | 27                    | 4.64%  | 243   | 42.16%  |
| Other Secondary or<br>Higher Institutions | 82              | 14.11% | 38                    | 6.54%  | 120   | 20.65%  |
| No Secondary or<br>Higher Training        | 450             | 77.79% | 118                   | 20.30% | 568   | 98.09%  |
|   |                 |        |                       |        | 11    | 1.91%   |
|   |                 |        |                       |        | 579   | 100.00% |

An examination of the figures shows that of the 580 students, only 11, or 1.91 per cent., were without a systematic training that would admit them to regular standing in some one of the several departments of the University. The large number of students who are graduates of colleges or of professional schools for teachers, 368 in all, is a special cause for congratulation. In addition, 80 students had taken partial courses in a college or in a professional school for teachers.

The following table affords a basis of comparison between the students at the Summer Session of 1900 and those at the Summer Session of 1901, with regard to their previous academic education:

|   | 1900 | 1901 |
|---|------|------|
| Graduates of Colleges.....                                    | 101  | 152  |
| Partial Courses in Colleges.....                              | 37   | 53   |
| Graduates of Professional Schools for Teachers .....          | 143  | 216  |
| Partial Courses in Professional Schools for Teachers.....     | 31   | 27   |
| Graduates of other Secondary or Higher Institutions .....     | 64   | 82   |
| Partial Courses in other Secondary or Higher Institutions.... | 10   | 38   |
|   | 386  | 568  |
| Having no Secondary or Higher Training.....                   | 31   | 11   |
|   | 417  | 579  |

As was the case a year ago, a large majority of the students at the Summer Session were teachers in active

service. The following table shows the kind or grade of educational work in which the 470 students who are teachers are engaged :

*Students Classified according to Teaching Positions*

|                                      |           |                |
|--------------------------------------|-----------|----------------|
| Elementary Schools.....              | 288       | 49.91 %        |
| Secondary Schools.....               | 85        | 14.65 %        |
| Higher Educational Institutions..... | 19        | 3.27 %         |
| Normal Schools.....                  | 23        | 3.95 %         |
| Superintendents.....                 | 2         | .35 %          |
| Special Teachers .....               | 11        | 1.89 %         |
| Teachers in Private Schools.....     | 42        | 7.22 %         |
|                                      | <hr/> 470 | <hr/> 81.24 %  |
| Not engaged in teaching .....        | 109       | 18.76 %        |
|                                      | <hr/> 579 | <hr/> 100.00 % |

Of the 579 students at the Summer Session of 1901, 413, or 71%, entered the University for the first time. 166, or 28%, had previously been matriculated in the University, and of this number, 82 were in attendance at the Summer Session of 1900.

The following tables show the classification of students according to sex, and as old or new students in the University :

*Students Classified according to Sex*

|            | 1900      |                | 1901      |                |
|------------|-----------|----------------|-----------|----------------|
| Men.....   | 114       | 27.34 %        | 153       | 26.68 %        |
| Women..... | 303       | 72.66 %        | 426       | 73.32 %        |
|            | <hr/> 417 | <hr/> 100.00 % | <hr/> 579 | <hr/> 100.00 % |

*Students Classified as Old and New*

|  |           |                |
|--|-----------|----------------|
| Previously matriculated in the University..... | 166       | 28.92 %        |
| New Students.....                              | 413       | 71.08 %        |
|  | <hr/> 579 | <hr/> 100.00 % |

The very large proportion of the student-body, as was the case a year ago, came from the States included in the North Atlantic Division, but the proportion of such students to the whole body, 83.82%, is somewhat less than was the case in 1900; then it was 88%.

The following table shows the students at the Summer Session of 1901 classified according to residence and compared with the similar classification of the students in the Summer Session of 1900:

*Students Classified according to Residence*

|                           | 1900 |          |         | 1901 |          |         |
|---------------------------|------|----------|---------|------|----------|---------|
| North Atlantic Division : |      |          |         |      |          |         |
| Maine.....                | 2    |          |         | —    |          |         |
| Massachusetts.....        | 6    |          |         | 9    |          |         |
| New Hampshire.....        | —    |          |         | 2    |          |         |
| Connecticut.....          | 10   |          |         | 6    |          |         |
| New York :                |      |          |         |      |          |         |
| Outside New York          |      |          |         |      |          |         |
| City.....                 | 40   |          |         | 50   |          |         |
| New York City :           |      |          |         |      |          |         |
| Manhattan and             |      |          |         |      |          |         |
| the Bronx... 141          |      |          |         | 236  |          |         |
| Brooklyn..... 68          |      |          |         | 85   |          |         |
| Queens..... 21            |      |          |         | 16   |          |         |
| Richmond.... 12           | 242  | 282      |         | 10   | 347      | 397     |
|                           | —    | —        |         | —    | —        |         |
| New Jersey.....           | 57   |          |         | 54   |          |         |
| Pennsylvania.....         | 10   | 367      | 88.00 % | 17   | 485      | 83.77 % |
|                           | —    | —        |         | —    | —        |         |
| South Atlantic Division : |      |          |         |      |          |         |
| Maryland.....             | 3    |          |         | 7    |          |         |
| District of Columbia..... | 1    |          |         | 7    |          |         |
| Virginia.....             | 3    |          |         | 4    |          |         |
| North Carolina.....       | 1    |          |         | 2    |          |         |
| South Carolina.....       | 2    |          |         | 1    |          |         |
| Georgia.....              | 1    |          |         | 8    |          |         |
| Florida.....              | 1    | 12       | 2.88 %  | —    | 29       | 5.00 %  |
|                           | —    | —        |         | —    | —        |         |
| South Central Division :  |      |          |         |      |          |         |
| Kentucky.....             | 2    |          |         | 1    |          |         |
| Alabama.....              | 2    |          |         | 8    |          |         |
| Louisiana.....            | 2    |          |         | 3    |          |         |
| Oklahoma.....             | 3    |          |         | 1    |          |         |
| Texas.....                | —    |          |         | 6    |          |         |
| Arkansas.....             | —    | 9        | 2.13 %  | 1    | 20       | 3.46 %  |
|                           | —    | —        |         | —    | —        |         |
| North Central Division :  |      |          |         |      |          |         |
| Nebraska.....             | —    |          |         | 2    |          |         |
| Ohio.....                 | 11   |          |         | 5    |          |         |
| Indiana.....              | 2    |          |         | 3    |          |         |
| Illinois.....             | 2    |          |         | 2    |          |         |
| Michigan.....             | 3    |          |         | 1    |          |         |
| Missouri.....             | 4    |          |         | 11   |          |         |
| Kansas.....               | 1    |          |         | —    |          |         |
| Wisconsin.....            | —    |          |         | 3    |          |         |
| Minnesota.....            | —    |          |         | 4    |          |         |
| Iowa.....                 | —    | 23       | 5.55 %  | 3    | 34       | 5.88 %  |
|                           | —    | —        |         | —    | —        |         |
| Western Division :        |      |          |         |      |          |         |
| Montana.....              | 1    |          |         | 1    |          |         |
| Colorado.....             | 1    |          |         | 2    |          |         |
| California.....           | 2    |          |         | 4    |          |         |
| Utah.....                 | —    | 4        | 0.96 %  | 1    | 8        | 1.38 %  |
|                           | —    | —        |         | —    | —        |         |
| Canada.....               | 2    |          |         | 1    |          | .17 %   |
| Cuba.....                 | —    |          |         | 1    |          | .17 %   |
| Scotland.....             | —    | 2        | 0.48 %  | 1    | 3        | .17 %   |
|                           | —    | —        |         | —    | —        |         |
|                           | 417  | 100.00 % |         | 579  | 100.00 % |         |

A very valuable and interesting feature of the Summer Session of 1901 has been the series of public lectures on Public subjects of present scientific or literary interest, Lectures given on each Tuesday and Thursday afternoon, during five weeks of the session, at half-past four o'clock. For these lectures the University is indebted to the generous co-operation of Professors Crocker, Matthews, Rees, and Dr. Canfield, in addition to Professors Egbert, Hallock, Jackson, Monroe, Thorndike, and Trent of the teaching staff at the Summer Session. In addition, Professor Hallock offered three lectures and demonstrations of some of the more striking of recently discovered physical phenomena.

The list of public lectures and the attendance upon each is added hereto:

|   | Attendance |
|---|------------|
| July 9—Professor ABRAHAM VALENTINE WILLIAMS JACKSON,<br>India, Old and New. (Illustrated)                                   | 150        |
| 11—Professor FRANCIS BACON CROCKER,<br>The Significance of the Most Important Electrical Terms.<br>(Illustrated)            | 50         |
| 16—Professor JAMES CHIDESTER EGBERT, Jr.,<br>The Roman Triumphal Arch: the Arch of Trajan at Bene-<br>ventum. (Illustrated) | 125        |
| 18—Professor WILLIAM PETERFIELD TRENT,<br>The Literature of the American Revolution.  | 150        |
| 23—Professor WILLIAM HALLOCK,<br>The Atom in the light of recent investigations. (Illustrated)                              | 80         |
| 25—Professor EDWARD LEE THORNDIKE,<br>The Mental Life of Monkeys.   | 155        |
| 30—Professor PAUL MONROE,<br>School Life in the Past. (Illustrated)   | 180        |
| Aug. 1—Professor BRANDER MATTHEWS,<br>The Art of the Dramatist.   | 240        |
| 6—Professor JOHN KROM REES,<br>Some Recent Developments in Astronomical Photography<br>(Illustrated)                        | 55         |
| 8—Dr. JAMES HULME CANFIELD,<br>The Companionship of Books.  | 130        |

On Saturday of each week during the Summer Session the students were given the opportunity to visit some point of interest in the vicinity of New York, or Excur- the collections in one of the great museums of sions the city, under the guidance of Mr. George S. Kellogg of Teachers College. These excursions were greatly enjoyed. The following is a list of the places visited and the number of students making the trip :

|      |     |                                      |    |
|------|-----|--------------------------------------|----|
| July | 13. | West Point, N. Y.....                | 51 |
|      | 20. | Seabright, N. J.....                 | 25 |
|      | 27. | Tarrytown and Sleepy Hollow.....     | 84 |
| Aug. | 3.  | Metropolitan Museum of Art.....      | 55 |
|      | 10. | Brooklyn Museum and Prospect Park .. | 30 |
|      | 17. | American Museum of Natural History.. | 12 |

By authority of the Trustees, the Summer Session of 1901 was credited with the unexpended balance of income remaining from the Summer Session of 1900, as well as with the fees earned in 1901. The charges Finances have included the cost of keeping open and in order the several buildings used for Summer Session instruction, together with the expenditures for general administration, salaries, and educational supplies.

As shown in my last annual report, the excess of income over expenditures for the Summer Session of 1900 amounted to \$2,403.89. By the return of tuition fees, amounting to \$167.50, to students who, for one reason or another, had withdrawn from the Summer Session after registering, this balance was subsequently reduced to \$2,236.39. The income from fees for the Summer Session of 1901 was \$17,135, subsequently reduced by fees returned (\$145) to \$16,990, as shown in detail below, and the expenditures chargeable to this income were \$12,308.96. The balance from the Summer Session of 1901, therefore, is \$4,681.04, which, added to the surplus from 1900 (\$2,236.39), leaves a total sum of \$6,917.43 to the credit of the Summer Session account.

An itemized statement of the income and expenditures for the Summer Session of 1901 and a comparison of the figures with those for 1900 is given herewith.

*Income*

|  |            |
|--|------------|
| Balance from Summer Session of 1900, as shown in last annual report..... | \$2,403 89 |
| Less Fees (1900) returned.....   | 167 50     |
| Net Balance.....   | \$2,236 39 |

|                       | 1900 |        |          | 1901 |               |          |          |             |
|-----------------------|------|--------|----------|------|---------------|----------|----------|-------------|
| A. Tuition fees.....  | 416  | @ \$25 | \$10,400 | 580* | @ \$25        | \$14,500 |          |             |
| B. Matriculation fees | 342  | @ 5    | 1,710    | 416  | @ 5           | 2,080    |          |             |
| C. Gymnasium fees..   | 48   | @ 5    | 240      | 111  | @ 5           | 555      |          |             |
|                       |      |        | \$12,350 |      |               |          | \$17,135 |             |
|                       |      |        |          |      | Less fees re- |          | 145      | \$16,990    |
|                       |      |        |          |      | turned.....   |          |          | \$19,226 39 |

*Expenditures*

|                            | 1900       | 1901        |
|----------------------------|------------|-------------|
| A. Administration :        |            |             |
| 1. Advertising.....        | —          | —           |
| 2. Clerical Services.....  | \$423 00   | \$ 196 73   |
| 3. Postage and Express.    | 212 29     | 313 49      |
| 4. Printing.....           | 507 29     | 662 31      |
| 5. Stationery and Inci-    |            |             |
| dentials.....              | 76 33      | 138 47      |
|                            | \$1,228 91 | \$1,311 00  |
| B. Instruction :           |            |             |
| 1. Salaries.....           | \$7,110 00 | \$9,020 00  |
| 2. Supplies.....           | 98 20      | 220 64      |
| 3. Public Lectures....     | —          | 100 00      |
|                            | 7,208 20   | 9,340 64    |
| C. Buildings and Grounds : |            |             |
| a. Columbia University :   |            |             |
| 1. Water Rates.....        | \$147 74   | \$167 00    |
| 2. Gas and Electricity ..  | 83 49      | 78 19       |
| 3. Fuel.....               | 321 48     | 374 85      |
| 4. Cleaning.....           | 33 36      | 50 00       |
| 5. Superintendent's Sup-   |            |             |
| plies.....                 | 98 36      | 112 00      |
| 6. Labor and Attendance    | 593 57     | 642 28      |
| 7. Service at Lectures..   | —          | 33 00       |
|                            | \$1,278    | \$1,457 32  |
| b. Teachers College.....   | 231 00     |             |
|                            | 1,509 00   | 200 00      |
|                            |            | 1,657 32    |
| Total.....                 | \$9,946 11 | \$12,308 96 |

\* One student paid tuition fee without registering. This explains the discrepancy between the financial returns (for 580 students) and the number registered (579).

|                            | 1900              |                | 1901               |                |
|----------------------------|-------------------|----------------|--------------------|----------------|
|                            | Total             | Per<br>Capita  | Total              | Per<br>Capita  |
| Administration.....        | \$1,228 91        | \$ 2 95        | \$1,311 00         | \$2 26         |
| Instruction .....          | 7,208 20          | 17 28          | 9,340 64           | 16 10          |
| Buildings and Grounds..... | 1,509 00          | 3 62           | 1,657 32           | 2 86           |
|                            | <u>\$9,946 11</u> | <u>\$23 85</u> | <u>\$12,308 96</u> | <u>\$21 22</u> |

The average fee paid by each student in 1901 was \$29.36. The excess of receipts over expenditures, per capita, which in 1900 was \$5.76, is, for 1901, \$8.14.

The experience of two successive years has demonstrated that large numbers of students wish to attend a Summer Session at Columbia University, that the instruction given at that Session can be of high quality and effectiveness, and that the Summer Session is a distinct source of strength to the University. The figures which are cited below prove that the great universities of the United States have something to give which thousands of competent students are willing to sacrifice a portion of the usual vacation period to obtain. At five representative and widely separated universities the attendance at the Summer Sessions of 1900 and 1901 has been as follows:

|                             | 1900        | 1901        |
|-----------------------------|-------------|-------------|
| California University.....  | 433         | 790         |
| Chicago, University of..... | 1674        | 1697        |
| Columbia University.....    | 417         | 580         |
| Cornell University.....     | 356         | 423         |
| Harvard University.....     | 784         | 766         |
| Totals.....                 | <u>3664</u> | <u>4526</u> |

It is obvious that in establishing a Summer Session Columbia University has entered upon a new stage of development which, sooner or later, will have most important consequences. It will be necessary to consider in the not distant future whether the needs of modern academic life and standards do not require that the library, laboratories, and lecture-rooms of a great urban university be kept open and at the service of students throughout the year, the service and compensation of instructors and administrators



being adjusted to an annual period of duty of nine months each. It seems clear that for the present a Summer Session of six weeks can be maintained at Columbia so as to strengthen our work in every department and yet not tax the financial resources of the corporation. For 1902 it would be entirely safe to plan a Summer Session on the hypothesis that there will be an attendance of 600 students, paying an average fee of \$29.25, or \$17,550 in all.

Another year, courses in chemistry and geography should be added to those given in 1901, and the number of courses offered in French, history, Latin, and mathematics should be increased. More advanced and research courses should be offered in those departments which are now well established.

Respectfully submitted,

NICHOLAS MURRAY BUTLER,  
*Director.*

August 17, 1901

## LIBRARY

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### REPORT OF THE LIBRARIAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1901

*To the President of Columbia University  
in the City of New York:*

SIR:

I have the honor to submit herewith the annual report of the Library of this University for the year ending June 30, 1901.

The organization described somewhat in detail in my last report has been maintained throughout the present year, **Organiza-** with but slight modifications. The more thor-  
**tion** ough test of these methods of work possible during a second year of trial has given entirely satisfactory results. Supervisors of departments and others charged with responsibility have responded to all demands made upon them; and the administration of the Library in every direction has moved without friction and with very gratifying efficiency.

The work of this department has been accomplished with the same accuracy in every detail which marked the adminis-  
**Order De-** tration of last year. The increased demands upon  
**partment** the department, due to the large number of orders based upon second-hand catalogues, has called for extra help, which has been very kindly loaned by the Catalogue Department.

There were sent out 5798 orders, of which a very large number were from second-hand catalogues—these having been submitted to the officers of the University most interested, and only those items ordered which were approved by them.

The initiative of purchase has been left with the heads of departments, as last year. This method met with general and hearty approval. The Librarian has made no demands upon any departmental fund without the full knowledge and consent of the head of that department.

Four thousand and fifty-eight orders have been filled, 953 orders are still on file or outstanding, and 787 orders have been cancelled. The apparently large number of cancelled orders is due to the fact that titles in foreign second-hand lists were frequently sold before our orders reached the dealers; and to the further fact that we have adopted the plan of cancelling all orders (with few exceptions) based upon foreign second-hand catalogues within forty days from the date of the order. This plan has ensured prompt action on the part of our foreign correspondents, and has relieved our books and accounts of a large number of otherwise outstanding orders which constantly tend to confusion and loss.

In nearly every department the demands for books have far exceeded the appropriations, and many orders must be carried over to be supplied out of next year's funds. There has been constant proof during the year of both the wisdom and moderation of the statement of demands and possible expenditures which was made in my last report (see page 354, President's Annual Report, 1900). This demand during the year has seemed peculiarly intelligent, and is striking evidence of the steady and rapid growth of the University at large, as well as of the increasing use and efficiency of the Library.

The special appropriations for the year for the completion of sets of periodicals proved exceedingly valuable, many important sets having been entirely completed and thus brought into renewed and increasing efficiency. As far as possible this policy will be maintained from year to year.

The number of volumes added during the year was 7645 by purchase, 6352 by gift, 1258 by exchange, 2151 by the binding of pamphlets and other unbound material, and 153 volumes taken from an old-time collection thought to be entirely duplicates—total, 17,559.

The Library now numbers 311,000 volumes.

The list of donors for the year is appended to this report, and made part of the same.

Among the more important works which have been added are the following: *La Harpe, Lycée, ou cours de littérature*, 16 vols., 1821; *Schubert, Werke*, 32 vols.; *Mining Reports*, 30 vols.; *Deutsche Blätter*, 1874-94, 21 vols.; *France Min. de l'instruc. Publ. l'enseignement supérieur*, 1883-99; *Nachrichten d. Gött. Acad. d. wiss.*, 1865-83; *Encyclop. of Laws of England*, 12 vols.; *Dublin Review*, 99 vols.; *Investor's Monthly Manual*, 29 vols.; *National Review*, 18 vols.; *Dumas, Théâtre Complet*, 25 vols.; *Scribe, Œuvres complètes*, 68 vols.; *Weitzel, Schule d. Maschinen technikers*, 17 vols.; *York Deeds of 1642-1726*, 11 vols.; *Revue critique d'hist. et de littérature*, 17 vols.; *Scottish Hist. Soc. Publications*, 32 vols.; *Bannatyne Club Publications*, 95 vols.; *Maitland Club Publications*, 51 vols.; *Journals of the House of Lords*, 1831-97, 55 vols.; *Baude, Cahiers d'une élève de St. Denis*, 15 vols.; *Balsac's Works*, 32 vols.; *Molière, Œuvres*, 1682, 8 vols.; *Deutsche Literaturdenkmale d. 18 u. 19 jahrh.*, Nos. 1-75; *Physikalisches Wörterbuch*, 23 vols.; *Revue des deux mondes*, 148 vols.; *Aretino, Lettere*, 6 vols., 1609; *Mekize Nirdamin*, 28 vols.; *Cases' and Points*, 78 vols.; *Beraldi, Graveurs du 19<sup>me</sup> siècle*, 13 vols.; *Economisti Italiani*, 50 vols.

The collection received from the Holland Society is noticed elsewhere in this report.

There could be no better proof of the sound organization of this department and of the wisdom of its administration under its present Supervisor, than the fact that during her absence of nearly three months, caused by severe illness, the work of the department moved forward under the efficient assistants without appreciable loss of time or energy. The interest of these assistants in their work and their loyalty to the Library were thus very strikingly exemplified.

During the entire year the work of this department has been kept strictly up to date. During part of the winter, when the influx of books was small, much time Catalogue Department was given to analyzing back numbers of periodicals not indexed in Poole. A large amount of material was made available in this way, and

the usefulness of the general catalogue greatly increased. The department also commenced to analyze those years of United States public documents not included in the catalogue prepared by the general government. A duplicate author-catalogue of books in the Department of Latin was made and sent to the department. Nearly nine thousand cards for the botanical books loaned to the New York Botanical Garden were copied there and returned to our catalogue. Something over fifteen hundred cross-reference cards, for charity organizations, etc., in the United States, were made; bringing under each State proper reference to all prison, hospital, and charity reports relating to that State. Not less than a thousand pamphlets relating to the French Revolution were catalogued and added to our already large collection on that subject. Something over one hundred Chinese and Japanese books were catalogued by an expert in those languages. A catalogue of special reference books—books temporarily placed upon the reference shelves by instructors for the use of their classes—was made. The department continued its work in connection with other libraries in the co-operative cataloguing of scientific periodicals, and received from this source 6045 cards, at a total cost to this Library of \$16.50.

There were added to the catalogue of this Library during the year 69,550 cards and 1074 guide cards.

Following our custom, the department has trained two apprentices during the year. After doing very satisfactory work they left us on the 1st of May to accept positions elsewhere.

During the latter half of the year the department has been experimenting with a new-model typewriter in the substitution of typewritten cards for those formerly written or printed by hand. Work was begun on this machine on the 1st of March, and already three young women are able to do the work which formerly required six. Two of these young women alternate in the use of the machine, a full day's work at the machine being thought too serious a strain upon the nervous system; while a third assists these in adding subject headings, the call numbers and accession numbers, and

in marking books. We are promised a combination of color in the ribbons of the machine by means of which the cards can be almost entirely made by the machine. The work is still in an experimental stage, but we hope during the coming year to be able to show results which will justify the change to even the most ardent admirers of the old hand-printed card.

From time to time during the year we have loaned members of the cataloguing staff to other libraries—both private and public—for a short time, and always with most satisfactory results. Two members of this staff have accepted commercial positions, and reports of their efficiency are most gratifying.

The department has been able to increase its helpfulness to officers of the University and in department work, much to the satisfaction of all concerned.

The work of this department has been carried on during the past year under its new Supervisor, Dr. V. G. Simkhovitch; the former Supervisor, Mr. James T. Gerould, having been called to be Head Librarian of the State University of Missouri, where he has already made an enviable record.

Twelve hundred and ninety-seven serials have been subscribed for during the year. The reading-room has been exceedingly crowded, and the accommodations given to the readers of periodicals have not been satisfactory. The establishment of a Science Seminar, in Havemeyer Hall, furnished some relief, but we are still sadly in need of a much larger room. There is constant question as to the wisdom of the decentralization of periodical reading matter, but we are regarding this entirely from the standpoint of the usefulness of the department. Undergraduates seem to give comparatively little time to the science periodicals, and the distribution of these serials to the several seminars is probably in the interest of graduates and their work.

There is a constant and apparently growing demand for newspapers, which thus far we have not undertaken to meet. It has been thought that the present exceedingly low price of the daily press of this city practically puts the daily news

within the reach of all students, and there is a question whether with the present limited capacity of our reading-room we can provide for other than those carrying more serious work. It is thought that possibly the reading-room in Earl Hall may offer relief in this direction. Somewhere on the campus there ought to be a collection of representative daily papers from the great centres of interest, not only in this country but abroad.

This department is charged with the care of all unbound material, and has accomplished an unusual amount of work in this direction during the past year. Our large collection of charity reports, numbering perhaps eight thousand titles, was made available. About seven thousand unbound volumes and about two thousand bound volumes of the publications and reports of the different States and of charitable and other similar institutions were received, acknowledged, classified, and roughly catalogued. About eight thousand five hundred pamphlets were checked up carefully with our present catalogue, classified, and prepared for the binder. Something over fifteen hundred pamphlets of the Egleston Library were classified and catalogued. The department also checked over with great care our duplicate periodicals, titles from A to M, about two thousand of which have been laid aside for sale.

The Supervisor of this department has general charge of the binding done for the Library, and has rendered peculiarly efficient service in this direction during the year. The binding for the Library has never been better in quality, nor as economical in cost. Through the generosity of an unnamed friend of the University we received a special grant for binding and rebinding, which was most welcome and was most usefully applied. A very large number of volumes in the Phoenix collection were rebound, the binding of pamphlets referred to above was accomplished, and a large amount of unbound material of great value, which had long been upon our storage shelves, was rendered available.

Certain new methods and new materials have been introduced by the Supervisor with excellent results. As illustrations: certain periodicals and newspapers are now bound

as pamphlets with extra thick boards for nine cents each, for which we once paid two dollars. The difference between newspaper binding and pamphlet binding is practically almost in name only. The binding is in every respect the same, except that buckram is used for the back instead of canvas, and that no lettering is required. In many sets morocco has been replaced by an extra strong canvas, manufactured especially for the Boston Public Library. On ancient books we are using English pigskin instead of morocco; and on very valuable books, French levant. Other changes in both methods and material will be made during the coming year, at the close of which we hope to see our entire work in binding established upon a fixed and approved basis.

The Library has received very distinct aid from the Supervisor of the Serial Department during the last year in the selection and recommendation of books from second-hand catalogues of foreign dealers. This Library is built up systematically around the work of the various departments of the University. Its demands are not those of a public library, and its growth will necessarily be along other lines. Of current books and publications it takes only those touching its own daily life, and of these it limits its acquisitions to writers who speak with authority. While the resources of the Library are not sufficient for all its demands, it finds itself able to begin the work of filling the gaps which existed in its collection of the literature of the past. Each department is spending more and more each year in securing authors and titles which bear upon what may properly be called the history of its own work. Most of these books are to be found in the catalogues of the second-hand dealers abroad; many of them out of print and rare, and ordinarily bringing high prices, but many of them to be secured at very reasonable rates. It is probably quite true that in every institution the officers in which are given to investigation and research, the buying of second-hand books is of even more importance than the purchase of new books. There is a constant demand, not for books about sources, but for the sources themselves. In the sciences, of course, these older books have historical value only; but even in the sciences it is very



desirable that complete sets of periodicals and of dissertations should be at hand.

It is a comparatively easy task for an officer of an institution in which the library is small and poor, to make out a list of the books which he needs and desires. As the library becomes more complete, his task becomes more difficult; and the point is finally reached when it is practically impossible for an officer to order wisely without the aid of an experienced bibliographer.

Fortunately for the University, the present Supervisor of the Department of Serials has found for many years the study of second-hand catalogues and the work of book-hunting a constant source of pleasure, and has made it his chief occupation. During the year just closed he has read and checked for this Library the catalogues of something over twelve hundred dealers who were asked to place this Library on their permanent mailing lists. We are now sending circular letters to some three thousand more dealers, and hope to add largely to our facilities in this line. Nearly every department of the University has made use of these second-hand catalogues and of the assistance thus offered.

All books belonging to the Library are in charge of this department after they have left the hands of the cataloguers, **Shelf De-** except when they are recorded as being in use. **partment** The work of the department during the year has been peculiarly satisfactory, and officers of the University unite in a general statement that the condition of the shelves was never more acceptable than at present.

Because of the rapid growth of the Library many changes have been made in the location of books, in addition to the numerous changes which became necessary by the filling up of some particular section. Some of the Seminar rooms are already overcrowded, and it has required great tact and good judgment to keep within easy reach the books that are in more constant use, and yet avoid very serious breaks in our general method of classification and shelf-listing. The condition of this department in this respect gives additional weight to the demand for more room. In fact, it seems quite imperative that a large amount of University work now pro-

vided for in the Library building should be transferred to some other building.

In all the changes which have been made, the interests of the reader have been the first concern of the department. There has been constant effort to make most accessible the books which are most used, and to place correlated titles as near together as possible. At the same time care has been taken to prevent pinching or straining of the books by overcrowding, and yet keep the shelves well filled.

The Supervisor of this department reports that in this large Library and with present help, the matter of dusting books must abide its own time. It is quite impossible to go over the entire Library more than once a year. He thinks the books do not need this care quite as much as some people imagine. Books which are subject to continual use need comparatively little attention in this direction, and this he thinks equally true of some books which remain upon the shelves for weeks and months without being used at all. There is a question as to whether a thin layer of dust is really damaging to a book, and may not even aid in its preservation. This latter theory is accepted by some of the most expert librarians.

Gilding of call-numbers and the repairing of the books is also under the charge of this department and in the hands of an experienced workman. During the year a very systematic overhauling of all books in the Library has been in progress. More than one third of all the books have been examined, and those needing repairs or those upon which the call-numbers had grown dim were cared for. This work will be continued. A large number of old books, but little used, with the sewing still good, but with backs broken or covers gone, have been rebacked or recovered or both; and are now in condition to stand the wear and tear of the shelves or such use as is made of them, without large expense in rebinding.

When the Library was moved to its present site, there came with it a large number of miscellaneous duplicates, besides an enormous amount of material relating to the University. This unclassified material was stored away wherever

space could be found, and, together with that which accumulated during the following years, made a constant demand for care which for a long time it seemed impossible to furnish. During the last year, however, this work, mainly of disposition, was commenced. Space was secured in the sub-basement, where rough stacks were built, and the duplicates which might be of value either by sale or exchange were brought together and classified. After the officers of the University had been given opportunity to examine this material, and select such as they might wish set aside for departmental use or might desire to purchase for their own libraries, the remaining duplicates were examined. Something over five thousand were classified and roughly catalogued, the cards placed in a case prepared for them, and these were then sent to several of the leading colleges and universities and public libraries with which we have exchange account. Thus far, titles valued at about eleven hundred dollars have been disposed of, chiefly through exchange.

A large part of the *Columbiana* material was found to be of little or no use, consisting of large remnants of editions of announcements, circulars, etc.; and about two tons of this were sold last winter as old paper. Anything valuable in making our records of Columbia happenings more complete was carefully preserved. We have no suitable place in which to classify and preserve these miscellaneous titles and those which are constantly accumulating, and here again we experience the pressure for more room. If this Library is to be the heart of University life, it surely ought to contain the indelible records of that life as represented in its publications, official and unofficial, student and otherwise, and present these complete to date and accessible.

In this connection, suggestion is made that very great aid can be rendered by the officers and students of the University. Programmes, reports, addresses—in fact, anything that represents any aspect of the life of this University—will be gladly received. It is quite certain that if we had a proper room in which to preserve these records and to exhibit them, many might be induced to place in our charge collections which are now held as private.

The dissertations which are received from time to time are in charge of this department, and are stored in the stacks provided for them in room 105, which must be held as a general utility room until better provision can be made. We have sent dissertations to nineteen American colleges and to ninety-three foreign institutions, through the exchange established and conducted by the Smithsonian Institution.

During the year the Supervisor of this department has frequently called my attention to the fact that we are rapidly outgrowing our present accommodations, along all lines. We certainly cannot possibly continue more than a year or two longer without considerable increase of space, not only in the shelving of books, but for the other needs of this and other departments.

I cannot turn from this department without a word of commendation for the new Supervisor, Mr. Walter M. Gilbert; whose industry, efficiency, and loyalty have been constantly manifested throughout the year.

*Loan Division.*—The floor space occupied by this division is substantially the same as last year. Some minor changes have been made which add to the convenience and comfort of readers. Three sections of the general catalogue were removed and placed in the corridor opposite the loan desk, thus preventing the congestion which formerly occurred so frequently in the limited space between the loan desk and the catalogue cases. A brass bank-screen, with three openings, was thrown around the loan desk, which has greatly increased the orderliness of the work and the rapidity with which readers can be served.

There has been no special change in the method of serving readers during the past year. As nearly as can be determined, the time required to deliver a book to a reader after the application has been received at the desk averages about two and a half minutes under ordinary conditions, notwithstanding the greatly increased number of applications which require attention.

The desk record of books loaned is in three sections. The first section indicates what loans have been made outside of the Library, and what books have been removed from the

regular shelves to some reference shelf or to some table for temporary use, and is so arranged that it is possible to determine instantly whether a particular book has been loaned or transferred. The second section is used to ascertain the condition of the account of a person desiring to borrow, return, or renew a book. The third section indicates what books are due on a given day. This method of keeping the accounts involves considerable work on the part of the assistants, but it furnishes immediately all necessary information and enables the demands of readers to be accurately and quickly met.

When books are called for and found to be loaned out of the Library, if other material cannot be well substituted an arrangement is made for the early return of the titles required and the reader is notified of the return. There has been an increased demand for this kind of service, with a constant expression of increased satisfaction as to results.

Much attention has been given to the circulation of specially reserved volumes and of books set aside for class use and general reference. Wherever possible, arrangements have been made to accommodate borrowers by permitting books of this character to be taken from the building. Usually they have not been taken out until the close of the day, to be returned at a fixed hour on the following morning. By this arrangement we have been able to meet the demands of a very large number of readers, without interfering with the work of others who are pursuing the same subject. To make these loans wisely and safely, a personal and close acquaintance with the nature of the work carried on in the various departments is necessary. The demand for this class of loans has greatly increased.

During the year 87,848 volumes were loaned out of the building; and in addition to this, 15,540 volumes were renewed, making a total of 103,388 volumes loaned and renewed.

The number of persons who have borrowed books from the Library within the current year was 3133, classified thus:

|  |      |
|--|------|
| Officers of the University, including instructors, tutors, and assistants..... | 404  |
| Graduates: Columbia, 603; Barnard, 69; Teachers College, 22..                  | 694  |
| Students: Columbia, 1515; Barnard, 288; Teachers College, 220.                 | 2023 |
| Auditors.....  | 12   |

The character of the circulation for use outside the building seems to have changed slightly. To determine this, the following statement taken from the records will suffice:

December, 1900, 5404 volumes were loaned out, as against December, 1899, 5047 volumes; classified as follows:

|               | 1900-1 | 1899-00 |                         | 1900-1 | 1899-00 |
|---------------|--------|---------|-------------------------|--------|---------|
| Bibliography  | 100    | 75      | Philology               | 560    | 781     |
| Philosophy    | 274    | 270     | Science and Useful Arts | 803    | 880     |
| Religion      | 158    | 79      | Fine Arts               | 90     | 40      |
| Sociology and |        |         | History and Biography   | 822    | 978     |
| Education     | 670    | 175     | Literatures, including  |        |         |
|               |        |         | Fiction                 | 1928   | 1796    |

The amount of fines collected for keeping books out of the Library beyond the time permitted by the rules was \$335.40, as against \$306.70 of the preceding year. The amount collected for lost books, not included in the above, was \$20.13. In addition to this, some books reported as lost have been replaced by new copies of identical editions, accepted in lieu of the cost of the book.

One book (of small value) was destroyed by the fire in College Hall on Friday, December 21, 1900.

The Library rules provide for loaning to other libraries such books as can be spared conveniently for a time. Under these conditions 184 volumes were loaned to 35 libraries classified by States as follows:

|               |   |               |    |                  |    |
|---------------|---|---------------|----|------------------|----|
| California    | 2 | Missouri      | 1  | Ohio             | 22 |
| Connecticut   | 6 | Nebraska      | 5  | Pennsylvania     | 32 |
| Illinois      | 4 | New Hampshire | 3  | Tennessee        | 1  |
| Iowa          | 7 | New Jersey    | 7  | Washington, D.C. | 1  |
| Maryland      | 4 | New York      | 80 | Wisconsin        | 1  |
| Massachusetts | 8 |               |    |                  |    |

The time of these loans varied from two days to several weeks. The cost of transportation was paid in every instance by the borrowing library, and from letters in hand it is evident that this service has been of value to the several libraries. This Library borrowed for its readers 59 volumes from ten libraries, classified as follows:

|               |    |                  |   |
|---------------|----|------------------|---|
| Massachusetts | 16 | Pennsylvania     | 9 |
| New Jersey    | 13 | Rhode Island     | 9 |
| New York      | 10 | Washington, D.C. | 2 |

The new rule affecting the accounts of University officers and the accounts of fellows and scholars has given very general satisfaction.

The most notable need in this division is more floor space. The screen back of the loan desk ought to be removed, and the loan desk set farther west and entirely remodelled. Back of this should be stacks or shelves for at least fifteen hundred special reference books. The catalogue cases ought to be withdrawn from the corridor and given space in the room in front of the loan desk.

The special statistics of this division are appended to this report and made part of the same.

*Reference Division.*—In addition to the number of volumes loaned out of the Library, referred to above, there have been delivered to readers by call-slips, for reference use only, 57,515 volumes, in addition to 14,618 volumes known to be used in the Avery Library, making a total reference use of 72,133 volumes. This, of course, is exclusive of the very large use made of books taken directly from the shelves by the students themselves in all the Seminar rooms, and by those students who are granted general admission to the stacks; and it also excludes the use made of the regular and special reference books on the shelves of the main reading-room.

It is a very difficult matter to represent in any adequate way by statistical tables the uses made of this Library. As showing, however, the increase in general efficiency, the following will be at least suggestive:

| LOANS FOR USE IN THE BUILDING |      |       |       |
|-------------------------------|------|-------|-------|
| Week ending                   | 1899 | 1900  | 1901  |
| Jan. 7                        | 836  | 1,077 | 1,153 |
| " 14                          | 863  | 1,191 | 1,422 |
| " 21                          | 777  | 899   | 1,448 |
| " 28                          | 641  | 1,156 | 1,523 |
| Feb. 4                        | 565  | 985   | 1,259 |
| " 11                          | 667  | 939   | 1,120 |
| " 18                          | 580  | 1,128 | 1,567 |
| " 25                          | 698  | 1,108 | 1,546 |
| Mar. 4                        | 661  | 1,154 | 1,577 |
| " 11                          | 855  | 1,290 | 1,554 |
| " 18                          | 735  | 1,232 | 1,697 |
| " 25                          | 673  | 1,377 | 1,731 |
| Apr. 1                        | 588  | 1,238 | 1,680 |

This statement is limited to one form of the use of the Library, but it may be taken as fairly typical of the increased use in every direction. It is not possible to determine with entire accuracy the use of the Library in this single direction, and it is more than probable that we are at least twenty-five per cent. below the actual use. Certainly this is not an over-estimate.

The average attendance of evening readers during the year has been sixty.

The short-title card catalogue of books on special reference, mentioned in connection with the catalogue department, has been freely used and has been very helpful. Each card bears the call-number of the book, as well as the number of the course for which the book is reserved.

The section for new books, where they are kept for a few days before being sent to their proper places on the shelves, has proved a great attraction, the difficulty being to keep the books thus exhibited as long as many desire.

The seating capacity of the general reading-room has been taxed to the uttermost nearly every hour of every day. There is constant overflow from the Law Library room and from the periodical reading-room, and there is a constant increase in the number of students who are seeking places in which to study during hours between the lectures or recitations. The condition of the general reading-room further emphasizes the demands made elsewhere for more floor space for the uses of the Library and its readers.

The unremitting and almost exclusive attention of the Head Reference Librarian, who is also editor of Library publications, has been given to the forthcoming catalogue of educational titles in this Library. It was thought at the outset that the Library possessed possibly six thousand titles. Large additions to this collection came in during the year and new matter has been found in almost every section of our classification. This has quite doubled the number of titles, and will bring the catalogue, including the author-index, up to four hundred and thirty-five pages. Those who have examined the advance sheets express themselves warmly as to the great value of this work.



The reference division of the Readers' Department also includes the Law Library and the Avery Library. With regard to the Law Library, you will recall that the Librarian of the University is not charged with its care, and that a special report will be made to you by the Dean of the School of Law. It seems entirely proper, however, to record that the relations of this library to the general Library have been exceedingly pleasant and helpful during the year, and that all reports which I have received of its management have been more than usually favorable.

Of the Avery Library it is very gratifying to be able to make the same satisfactory report as to progress and use that is made regarding the Library in general. The Purchasing Committee have coöperated with the University Librarian throughout the year with entire harmony and courtesy. The final decision in most cases has been left with Mr. Sturgis, who can always speak with entire authority in matters of this kind. The specialization of the Library has received even more than usual care, purchases being carefully restricted to the lines determined by the letter of foundation. There is a constant effort to regard quality and actual service, rather than quantity, as the determining characteristics in connection with all purchases.

The Avery Librarian has given much attention during the year to the matter of analyzing the contents of the more important works, along the lines of especial demands. The effort is to create a card catalogue of this library which will give at a glance its entire contents upon any given topic. This special catalogue, as far as now completed, has already proved of unusual value to the workers in this library. It has been very gratifying to be able to make provision for a competent assistant during the coming year, whose entire time will be given to this work.

The chief patrons of this library, within the University, are the Department of Architecture and Teachers College. Interesting and quite successful experiments have been made in organizing and directing the library work of these schools. Professor Ware's *Research and Essays* have been extremely helpful in increasing the acquaintance of young architects

with the books in this collection. Professors Kinne, Woolman, and others of Teachers College are doing similar work in connection with their own departments. In these ways and with these classes, as well as with architects and others resident in the city, the practical value of the library as a laboratory is being daily demonstrated. As the Librarian in charge well expresses it, at the close of his annual report: "To transfer art-literature into art is the object of our endeavor. There is gradually crystallizing about the Avery Library a school of design which may easily attain to a very large degree of usefulness and importance."

The Committee has purchased 144 volumes during the year, and has quite a large number of orders still outstanding. Two hundred and forty-four books and ten pamphlets were presented, of which by far the larger part came from Mr. Avery himself. The Avery Library now contains very nearly 17,000 volumes, the actual cost of which, with the endowment, has been about \$100,000. The endowment is now \$30,000, with an annual revenue of \$1275.

The aggregate loss in the Avery Library since its foundation is about thirty volumes, or about one-fifth of one per cent. of its contents. This is a rather remarkable showing when one considers the absolute freedom with which the shelves are thrown open to all workers. In this connection it may be proper to refer to the fact that the aggregate loss of the entire Library is but a trifle more than one-third of one per cent. of its entire contents. Recalling that this statement covers many years' administration, with the largest possible freedom of access to the shelves on the part of both officers and students, and includes also the almost necessary losses in connection with the removal of the Library from its old site, it will be seen that what is known as the open-shelf policy has more than made good all that was promised by those who initiated it, and that the losses occurring are far outweighed by the benefits received.

The new rule governing loans to University officers has been well received and has proved exceedingly acceptable. Under this rule the number of volumes which University officers may borrow is determined by the exigencies of their

work, all volumes being subject to the call of the Librarian at any time, to meet the unusual or necessary demands of Loans to others. No book may be retained by University officers longer than one year; and books borrowed for departmental or laboratory uses are so charged and are not entered upon private accounts. No difficulty whatever has been found in applying this rule, and all working under it have experienced a sense of relief. Its flexibility has added much to the efficiency of their labors.

During the year a large number of departmental libraries have been merged in the General Library, the departments interested taking the initiative in this movement. It is beginning to be quite clearly recognized that when the interests of all concerned are taken into consideration, the departmental library as necessarily administered in this University is not desirable. The policy of the University should be to place in the hands of the officers of each department, for the immediate use of themselves and of their assistants, such works as these officers cannot be reasonably expected to purchase for themselves. To this comparatively small collection should be added such works as form part of a laboratory equipment—books which are just as clearly entitled to be considered apparatus as any of the material equipment of a science laboratory. Outside of these two classes, all other works should be in the General Library, with such division and classification as may be found best fitted to the exigencies of the work of the institution. But the books furnished officers and their assistants, and those in laboratory libraries, should rarely if ever be counted as part of the General Library; should be charged directly to the departments, under the head of equipment, and should be purchased with equipment funds or with special grants. Very generally, almost universally, they will be duplicates of volumes which are in the General Library, and therefore their cataloguing and care by the General Library are useless.

A very unique and quite remarkable experiment is to be made during the coming year in this direction in the Division of History. By the generosity of an unnamed friend of the University, that division will expend between three

and four thousand dollars in the equipment of a laboratory library in History, for undergraduate students. While the officers of the University Library will coöperate with the officers of the departments interested in the selection of the purchase of these books, the classification and cataloguing of the books, the arrangement of the books upon the shelves, and the care of this special library will devolve entirely upon the Division of History. Each officer will see that the books to which he desires to refer his classes are selected and properly shelved, from time to time, as his work may change. The books are not for general circulation, the entire library being for reference only. It is not known that an experiment of this kind and of this magnitude has been made in any educational institution in this country, and the results are awaited with great interest by other departments.

Early in the year the books which have heretofore been in the special library of the Department of Chemistry were shelved in one of the rooms in Havemeyer Hall, and to these were added a special collection in Physics, Metallurgy, and Electrical Engineering. This is the beginning of a science seminar room, which it is hoped will ultimately equal in the number of volumes and in the convenience of its equipment the seminar rooms now in existence in the central Library building. This seminar was put in charge of one of the Library staff, and has been open during the usual Library hours, including evenings. From the seminar nearly fifteen hundred volumes were loaned during the year for use outside of the building, and the direct or seminar use was very gratifying. Ultimately this seminar ought to be removed to the central Library; a change which cannot be made until some of the work of instruction now carried on in this building is withdrawn.

The Library has maintained very helpful and pleasant relations with other similar institutions in the city and State and throughout the country at large. Coöperation As stated above, 184 volumes were loaned to tion thirty-five libraries. The details of this work are given elsewhere.

During the year the Pratt Institute Free Library, of

Brooklyn, gave an exhibition to illustrate the progress of printing, to which this Library loaned some of its choicest books to supplement the collection.

The Grolier Club of this city also held an exhibition illustrating the Poets Laureate of England, and upon request this Library loaned to the Club several rare volumes. The Club made ample return for this by the unusual courtesy of opening its library and collections one evening for the staff of this Library only, a private exhibition which was thoroughly appreciated and enjoyed by large numbers of those employed here.

We have continued the coöperative work in cataloguing science periodicals, of which report is made elsewhere.

This Library was represented at the meeting of the State Library Association at Lake Placid, in September; and at the joint meeting of the State Library Association and the Library Club of the City of New York, in March.

The usual visits have been made to this Library by classes and instructors of the library schools of the vicinity.

The exhibit of this Library which was made at the Paris Exposition was afterwards transferred to Manchester, England, where it attracted general and favorable attention, and is at present at the Pan-American Exhibit Exposition at Buffalo. The entire exhibit was carefully revised before being sent to Buffalo, under very competent supervision, and in its present position most favorably represents the work of this University, and is the subject of constant and complimentary comment.

In addition to the gift of \$10,000 by an unnamed friend, \$5000 has been given for general Library purposes. Mr.

**Gifts** Wm. C. Schermerhorn has given something over

\$2000 to complete our collection of British Parliamentary papers. Mr. Avery has added 200 volumes to the library which bears his name. We have been remembered again by the Duc de Loubat, in connection with his highly specialized publications. The Biblioteca Nacional de Chile presented us with 74 volumes bearing upon Spanish-American law. Mr. John D. Crimmins very generously completed the set of Mansi's *Amplissima Collectio*, the earlier

volumes of which he gave us some years ago. Mr. Geo. W. Cole, who two years ago gave us several hundred volumes of valuable State reports, has this year aided us in completing some of our broken sets. Professor Butler and Professor Seligman are constantly adding to our collection, and Professor Cattell remembers the Library most generously from year to year. Through the courtesy and loyalty of Commissioner Woodward this Library has a very complete collection of the reports and publications of the Paris Exposition. William I. Walter, Seth Sprague Terry, Miss Terry, Gustavus T. Kirby, Frank W. Savin, and the American Art Association secured for us the beautifully carved Japanese cabinet now standing in the corridor of the Avery Library, together with three thousand colored photographs of historical monuments and places in Europe, and exteriors and interiors (colored) covering the entire life of the people of China and Japan—a very remarkable collection. The American Mathematical Society has made this Library the depository of its entire collection. The Holland Society has placed in our care its unusually interesting collection of some six hundred bound volumes and pamphlets, including a remarkably complete collection of the works of Grotius. This library was so stored for a number of years that it was accessible only under unfavorable conditions, and as a consequence it has not had the prominence that its real value deserves. It is a collection of positive scientific worth, especially as it exhibits the learning and literary activity of Grotius, "who was at the same time theologian, historian, philologist, poet, the founder of Dutch jurisprudence and the father of international law." The entire collection is regarded as an acquisition of great value, and an unusual addition to the Library resources of this University.

It was a source of great gratification to both officers and students that we have been able to keep the Phoenix galleries open during the greater part of the year. Here-  
tofore these have been under lock and key, and the collection could be examined, therefore, only  
with considerable inconvenience and delay. A careful  
administration of our revenues made it possible to place

A Biblio-  
graphical  
Museum

an attendant in each gallery during the daylight hours of each week-day, except the afternoons of Saturdays; and the opportunity to examine this really remarkable collection was accepted with eagerness and was improved by a large number of visitors.

This serves to emphasize the suggestions made to you in a special report during the year concerning the desirability and feasibility of a bibliographical museum as a new department of the Library. We have here a large number of books which comparatively few libraries are so fortunate as to possess. I doubt if many of the officers of the University, even, know that we own such books as some of the earliest printed by Caxton and by Fynken de Worde in England, and books printed in Boston in the seventeenth century. We have a good collection of the beautiful *Books of Hours*, printed by Kerver, Voste, Pigouchet, and others; we have the first description of New York by Dayton (1670)—a pamphlet, a copy of which brought \$2000 at the Ashburton sale some months ago and was regarded as unique; we have the first folio of Shakespeare, probably worth \$6000. We have scores of such famous incunabula as the first printed edition of Euclid (1482), or the *Nuremberg Chronicle* (1493); and we have the first German edition of Amerigo Vespucci's book on the New World (1508), and the first complete collected editions of Chaucer (1542), Thomas More (1557), Molière (1682). We have a magnificent illuminated manuscript of the sixteenth century, valuable autograph manuscripts, some remarkable historical and artistic bindings, many unique parchment imprints—especially some in Hebrew.

Part of these are locked up in the vault, or what we call the "B" room, where few but members of the staff see them. Many others are in the Phoenix collection, which is on the fourth floor and somewhat inaccessible even when open. It is hardly too much to say that these rare books, which have a money value of perhaps \$150,000, are so inaccessible as to be of very little account for educational or scientific purposes.

Yet we have here a nucleus for a new department which, if systematically developed, cannot fail to be of both educational and scientific value, and a department which will

naturally grow rapidly by gifts from the many collectors in the city who are interested in such work and who are friendly to Columbia. More than once during the past winter gentlemen have stated that they were quite ready to present their collections, in part or entire, to this Library as soon as we had a suitable room for the care and display of the volumes.

The educational value of such a museum consists in the general elevation and the broader view of life and of history which a student obtains, even if he enters the room only occasionally and out of sheer curiosity. The mere sight of the first authentic editions of the earlier works of master minds naturally quickens even the most frivolous or indifferent. Further, such a museum is a sure cure for some quite common and widespread errors. Many a student of history, for instance, if asked concerning Luther's great work, would hardly fail to answer that the greatest service he rendered to his people lay in the fact that he was the first to give Germany a German Bible; yet it is entirely possible to present in such a museum nearly a dozen different German editions of the Bible published prior to the close of the fifteenth century. Nor should we forget that books and bindings illustrate history at large, and not infrequently throw light upon the characteristics of historical persons.

In addition to such general value, there is the special importance of such a collection to all students who are expected to do any original historical or philological research work. Not only in manuscripts and early editions themselves, but in the bibliographical material which such a collection will bring together, such students find their greatest incentive and surest reward.

I ventured during the year to suggest how a room may be secured for such a permanent exhibition, and I beg leave to express the hope that during the coming year ways and means may be found to meet this very reasonable demand.

The experience of the year has given added weight to the statements made in my last report concerning the desirability of establishing a full corps of reference li-  
brarians. Our collection is already of such mag-  
nitude as to make the assistance of such skilled workers

Reference Librarians



absolutely imperative to all readers. Up to this point we have relied largely, almost exclusively, upon our catalogue. Hereafter we must rely, first, upon those whom we can draw together in this service ; next, upon short and special bibliographies, printed or otherwise; and, last, upon the catalogue itself, chiefly of service to the members of the staff. As soon as the resources of the University will permit, we should add to the head reference librarian, and the reference librarians now in charge of the Avery Library and of the Law Library, others with special knowledge of the fields of inquiry covered by the various departments and divisions of the University work. At the close of a report already too long, I cannot dwell upon this as the topic deserves; but your most careful and thoughtful consideration of this subject is earnestly requested.

More than the usual recognition is hereby given to the Supervisors and to other members of the Library staff, whose loyalty and thoughtfulness in every direction have made the work of the year pleasant and successful. To the unusual competency, patience, and considerateness of these assistants is due the increasing reputation of this Library for efficiency and courtesy. Proper and full acknowledgment is made of the complete and valuable departmental reports, which are practically incorporated in my own.

I beg leave to express again my appreciation of the courtesies extended to me during the year by the Trustees and officers of the University and by yourself.

Respectfully submitted,

JAMES H. CANFIELD,  
*Librarian.*

July 30, 1901.

ADDITIONS TO THE LIBRARY  
1900-1901

| 1900       |      |       |      |      |      |      |      |      |      | 1901 |      |      |       |  | Total |
|------------|------|-------|------|------|------|------|------|------|------|------|------|------|-------|--|-------|
| July       | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May  | June |      |       |  |       |
| Purchase   | 565  | 506   | 751  | 615  | 279  | 590  | 762  | 671  | 710  | 830  | 824  | 542  | 7645  |  |       |
| Exchange   | 3    | 18    |      | 1    | 163  |      | 2    | 28   | 1    |      | 898  | 144  | 1258  |  |       |
| Given      | 151  | 292   | 82   | 1090 | 790  | 248  | 201  | 248  | 753  | 836  | 707  | 954  | 6352  |  |       |
| Bound      | 19   | 229   | 15   | 89   | 14   | 26   | 32   | 68   | 84   | 39   | 1417 | 119  | 2151  |  |       |
| From Dups. | 32   | 9     | 4    | 41   | 32   | 34   |      | 1    |      |      |      |      | 153   |  |       |
|            | 770  | 1054  | 852  | 1836 | 1278 | 898  | 997  | 1016 | 1548 | 1705 | 3846 | 1759 | 17559 |  |       |

## STATISTICS OF THE USE OF THE LIBRARY

|       | Days Open<br>1900-1901 | Loans 1900-1901 | Loans 1899-1900 | Renewals<br>1900-1901 | Renewals<br>1899-1900 | Total Loans<br>1900-1901 | Total Loans<br>1899-1900 | Daily Average<br>1900-1901 | Daily Average<br>1899-1900 | Largest Loaned<br>1900-1901 | Largest Loaned<br>1899-1900 | Smallest Loaned<br>1900-1901 | Smallest Loaned<br>1899-1900 | Fines 1900-1901 | Fines 1899-1900 | Readers' Tickets<br>Issued 1900-1901 | Readers' Tickets<br>Issued 1899-1900 |
|-------|------------------------|-----------------|-----------------|-----------------------|-----------------------|--------------------------|--------------------------|----------------------------|----------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|-----------------|-----------------|--------------------------------------|--------------------------------------|
| July  | 25                     | 3,071           | 2,503           | 980                   | 712                   | 4,051                    | 3,215                    | 162.0                      | 128.6                      | 605                         | 118                         | 71                           | 76                           | \$13.80         | \$12.05         | 12                                   | 2                                    |
| Aug.  | 27                     | 2,141           | 1,964           | 623                   | 589                   | 2,764                    | 2,553                    | 102.5                      | 94.5                       | 128                         | 106                         | 51                           | 50                           | 9.65            | 10.90           | 9                                    | 14                                   |
| Sept. | 25                     | 3,646           | 2,806           | 1,080                 | 754                   | 4,726                    | 2,958                    | 189.6                      | 123.2                      | 206                         | 150                         | 77                           | 12                           | 11.35           | 9.35            | 0                                    | 21                                   |
| Oct.  | 27                     | 9,504           | 7,309           | 1,422                 | 1,288                 | 10,984                   | 12,318                   | 406.8                      | 473.7                      | 320                         | 383                         | 209                          | 117                          | 25.40           | 18.25           | 55                                   | 43                                   |
| Nov.  | 25                     | 9,341           | 7,557           | 1,540                 | 1,288                 | 10,881                   | 8,545                    | 435.2                      | 353.8                      | 619                         | 491                         | 123                          | 134                          | 34.50           | 29.55           | 147                                  | 57                                   |
| Dec.  | 26                     | 7,248           | 7,916           | 1,484                 | 1,111                 | 8,732                    | 13,027                   | 335.8                      | 521.0                      | 436                         | 606                         | 172                          | 206                          | 35.70           | 35.05           | 15                                   | 29                                   |
| Jan.  | 27                     | 9,910           | 9,905           | 1,545                 | 1,404                 | 11,455                   | 12,309                   | 424.2                      | 455.0                      | 690                         | 548                         | 39                           | 48                           | 52.60           | 50.00           | 24                                   | 28                                   |
| Feb.  | 24                     | 9,347           | 9,703           | 1,503                 | 1,590                 | 10,856                   | 12,999                   | 432.0                      | 534.7                      | 645                         | 538                         | 158                          | 158                          | 32.40           | 29.00           | 24                                   | 28                                   |
| Mar.  | 26                     | 11,122          | 11,392          | 1,496                 | 1,586                 | 12,638                   | 13,078                   | 486.0                      | 517.7                      | 784                         | 560                         | 231                          | 327                          | 30.95           | 25.05           | 22                                   | 19                                   |
| April | 25                     | 10,234          | 10,008          | 1,730                 | 1,586                 | 11,964                   | 15,494                   | 478.5                      | 645.5                      | 624                         | 538                         | 244                          | 302                          | 33.80           | 30.25           | 27                                   | 37                                   |
| May   | 27                     | 8,902           | 8,296           | 1,439                 | 1,439                 | 10,421                   | 13,344                   | 385.9                      | 494.2                      | 480                         | 456                         | 110                          | 88                           | 39.55           | 37.55           | 6                                    | 10                                   |
| June  | 25                     | 3,214           | 3,929           | 708                   | 915                   | 3,922                    | 4,844                    | 150.8                      | 180.3                      | 300                         | 237                         | 58                           | 66                           | 15.70           | 19.10           | 11                                   | 19                                   |
|       | 300                    | 87,848          | 82,688          | 15,540                | 32,496                | 103,388                  | 115,184                  | 334.6                      | 376.4                      | ...                         | ...                         | ...                          | ...                          | \$335.40        | \$306.70        | 372                                  | 310                                  |

<sup>1</sup> This increase in loans would be still larger but for the increasing use of the laboratory libraries, of the direct service of which no records are kept; except the Science Seminar, from which 1473 volumes were loaned, though they are not included in this total.

<sup>2</sup> Decrease shows natural demand for reference rather than circulating library.

<sup>3</sup> Readers' tickets renewed for 1900-1901 (limited this year to renewals on special request), 106, as against 145 for the previous year.

## RECORD OF GIFTS

1900-1901

|                            | Vols. | Pam. |                               | Vols. | Pam. |
|----------------------------|-------|------|-------------------------------|-------|------|
| Aberdeen Univ. Lib'y       | 1     | 1    | Barnard Club (N. Y.)          |       | 1    |
| Acadia Coll. Lib'y         | 1     | 31   | Barrows, S. J.                | 1     | 1    |
| Acker, Finley              | 1     |      | Barton, W. E.                 |       | 3    |
| Actuarial Soc. of Amer.    |       | 1    | Bashforth, Francis            |       | 1    |
| Add. Ran Univ.             |       | 2    | Bayles, G. J.                 | 1     |      |
| Alabama Att'y Gen'l        |       | 2    | Baylor Univ.                  |       | 1    |
| " Geol. Survey             |       | 1    | Beebe, W. H. H.               |       | 49   |
| " Health Bd.               |       | 7    | Beer, William                 | 1     | 1    |
| " R. R. Com.               | 1     |      | Bell, J. P. Co.               | 1     |      |
| Albert Lea Coll.           |       | 1    | Benai Berith, Independ't      |       |      |
| Am. Acad. of Dramatic Arts |       | 1    | Order                         | 2     |      |
| " Anti-Imperialist         |       |      | Benedict Coll.                |       | 2    |
| " League                   | 1     | 12   | Beres Coll.                   |       | 1    |
| " Ass'n for Adv. of Phys.  |       |      | Berkshire Indust. Farm        |       | 1    |
| " Educ.                    |       | 1    | Berlin K. Kunstgewerbe        |       |      |
| " Ass'n for Teaching       |       |      | Museum                        |       | 1    |
| " Speech to the Deaf       | 3     | 14   | Berlin K. Tech. Hochschule    | 1     |      |
| " Bankers Ass'n            | 1     |      | Berlin Univ. Bibliothek       |       | 166  |
| " Bar Ass'n                | 1     |      | Bernice Punahii Bishop Mu-    |       |      |
| " Blower Co.               |       | 2    | seum                          | 2     | 2    |
| " Congregat. Ass'n         |       | 2    | Berwick y de Alba, La Du-     |       |      |
| " Ethnology, Bur.          | 1     |      | quesa de                      | 2     |      |
| " Forestry Ass'n           |       | 1    | Bethel Coll.                  |       | 1    |
| " Hist. Ass'n              | 1     |      | Bibl. de l'école Nat. Supéri- |       |      |
| " Humane Ass'n             |       | 1    | eure d. Mines                 | 3     |      |
| " Inst. of Elect. Eng.     | 1     |      | Binion, Joshua                | 7     |      |
| " Inst. of Mining Eng.     | 1     |      | " S. P.                       | 2     |      |
| " Irish Hist. Soc.         | 1     |      | Blackmar, F. W.               | 1     |      |
| " Math. Soc.               | 475   | 381  | Bodleian Lib'y                |       | 5    |
| " Museum of Nat. Hist.     | 2     | 3    | Bogert, M. T.                 |       | 1    |
| " Numismat. and Arch.      |       |      | Bond, W. R.                   | 1     |      |
| " Soc.                     | 1     |      | Boston Athenæum Lib'y         |       | 1    |
| " Sch. at Hartford         |       | 1    | " Auditor                     | 1     |      |
| " Soc. of Civil Eng.       | 1     | 1    | " Chamber of Com.             | 1     | 1    |
| " Soc. Heating and Ven-    |       |      | " Children's Aid Soc.         | 1     | 1    |
| " tilating Eng.            | 1     |      | " Coll.                       | 2     |      |
| " Soc. Mechan. Eng.        | 1     |      | " Museum of Fine Arts         | 5     |      |
| Andover Theol. Sem.        |       | 1    | " Normal Sch. of Gym.         | 1     | 6    |
| Andrews, Miss Grace        | 1     |      | " Port and Seamen's           |       |      |
| Anti-Imperialist League    |       |      | Aid Soc.                      |       | 1    |
| (Minn.)                    | 1     | 12   | " Pub. Lib'y                  |       | 2    |
| Appleton, F.               | 49    |      | " Registry Dept.              | 1     |      |
| Argentine Repub. Nat. Obs. |       |      | " Sch. of Expression          | 1     |      |
| " Oficina                  | 1     |      | " Transit Com.                |       | 1    |
| " Demogr.                  | 1     |      | " Univ.                       |       | 3    |
| Arizona Univ.              |       | 1    | Bowdoin Coll. Lib'y           |       | 12   |
| Arkansas Mines, Bur.       |       | 2    | Bridgeport Pub. Lib'y         |       | 2    |
| " Univ.                    |       | 1    | Brockhaus, F. A.              | 2     |      |
| Artois, Miss               | 2     |      | Brod, P. E.                   | 1     |      |
| Ass'n of Am. Anatomists    |       | 1    | Brook, J. R.                  | 1     |      |
| of Catholic Coll.          |       | 1    | Brookline Pub. Lib'y          |       | 1    |
| " of Coll. and Prepar'y    |       |      | Brooklyn Polytech. Inst.      |       | 3    |
| Sch.                       |       | 1    | " Eye and Ear Hos-            |       |      |
| Atlanta Baptist Coll.      |       | 9    | pital                         |       | 1    |
| " Carnegie Lib'y           |       | 1    | " Indust. Sch. Ass'n          |       | 1    |
| " Health Bd.               |       | 1    | " Inst. of Arts and           |       |      |
| Austria Handelsministerium | 1     |      | Sci.                          |       | 20   |
| Avery, S. P.               | 116   | 4    | " Sch. Supt.                  | 13    | 24   |
| Baker, F. T.               | 1     |      | Brown, W. L.                  |       | 2    |
| Balch, T. W.               | 1     |      | Brown, J. S.                  | 42    | 3    |
| Baldwin, Miss T. C.        |       | 1    | " M. B. & Co.                 | 4     |      |
| " Univ.                    |       | 1    | " Univ.                       |       | 14   |
| Baltimore Pub. Sch. Bd.    | 4     | 1    | Bryson Day Nursery            |       | 1    |
| Bardden, C. W.             | 1     |      | Buck, A. H.                   | 2     |      |
|                            |       |      | Buenos Ayres Museo Nac.       |       | 2    |

|                              | Vol. | Pam. |                             | Vol. | Pam. |
|------------------------------|------|------|-----------------------------|------|------|
| Buffalo Charity Organ. Soc.  |      | 1    | Congregational Home Mis-    |      |      |
| " Merchants' Ex.             |      | 1    | sion'y Soc.                 | 1    | 1    |
| " Pub. Lib'y                 |      | 1    | Connecticut Agr. Bd.        | 3    | 2    |
| Bulletin Russe de Statist.   |      | 1    | " Banks Com.                | 1    |      |
| Bunker Hill Mon. Ass'n       | 1    |      | " Charit's Bd.              | 1    |      |
| Butler, N. M.                | 334  | 1273 | " Comptroller               | 4    | 32   |
| California Acad. of Sci.     |      | 1    | " Educ. Bd.                 | 1    |      |
| " Controller                 | 1    | 1    | " Health Bd.                | 1    |      |
| " R. R. Com.                 | 5    | 1    | " Hospital for In-          |      | 28   |
| Univ. Lib'y                  |      | 4    | sane                        |      |      |
| Cambridge (Eng.) Philos.     |      |      | " Humane Soc.               |      | 1    |
| " Soc.                       | 2    | 1    | " Labor Bur.                | 15   |      |
| " (Mass.) Sch. Supt.         |      | 1    | " Mutual Life               |      |      |
| Canada Educ. Min.            | 1    |      | " Ins. Co.                  |      | 1    |
| " Geol. Survey               | 1    |      | " R. R. Com.                | 1    |      |
| Canadian Inst.               | 1    |      | " Sec. of State             |      | 4    |
| Cane, M. H.                  | 2    |      | " State Lib'y               | 68   | 61   |
| Canfield, C. W.              |      | 1    | " State Prison              | 5    | 7    |
| " J. H.                      | 1    | 32   | " Treasurer                 | 2    |      |
| Canisius Coll.               |      | 1    | Cooper, Jacob               |      | 2    |
| Carleton Coll.               |      | 1    | Cornell Univ. Lib'y         | 2    | 2    |
| Carlisle, Calderon           | 5    |      | Cornwall, E. A.             | 23   | 39   |
| Carnegie Lib'y (Pittsb.)     | 1    |      | Coubertin, Baron P. de      | 1    | 1    |
| (Atlanta)                    |      | 1    | Coudert, F. R., Jr.         |      | 4    |
| Carpenter, G. R.             | 29   | 129  | Council Bluffs Free Pub.    |      |      |
| " W. H.                      |      | 1    | Lib'y                       |      | 1    |
| Carre & Naud                 | 2    |      | Cushing, H. A.              | 31   | 7    |
| Caton, Richard               | 1    |      | Cutler Sch.                 |      | 1    |
| Cattell, J. McK.             | 363  | 847  | Daggett, J. M.              |      | 3    |
| Chandler, C. F.              |      | 3    | Dalhousie Univ.             |      | 2    |
| Chanler, W. A.               | 5    | 33   | Dalley, Henry               |      | 1    |
| Charleston Coll.             |      | 1    | Dartmouth Coll.             | 3    |      |
| Chicago and N. W. R. R.      | 1    |      | Davidson, Mr.               |      | 2    |
| " Arch. Club.                | 1    | 1    | " Coll.                     |      | 1    |
| " Educ. Bd.                  |      | 1    | " Israel                    |      | 4    |
| " John Crerar Lib'y          | 1    |      | Davis, A. McF.              |      | 3    |
| " Milw. and St. Paul         |      | 1    | Denison Univ.               |      | 1    |
| " R. R.                      |      | 1    | De Peyster, Gen. J. W.      | 3    | 1    |
| " Municipal Lib'y            |      | 1    | Detroit Coll.               |      | 1    |
| " Pub. Lib'y                 | 1    |      | " Pub. Lib'y                |      | 1    |
| " Univ.                      | 1    |      | " Univ. Sch.                |      | 1    |
| Chile Estadistica Com. Dept. | 1    |      | De Voe, Arthur              |      | 1    |
| Christian Bros. Coll.        |      | 2    | Dibblee, Mrs. S. M.         | 1    |      |
| Christiania Univ. Bibl.      | 1    |      | Dibblee, Mrs. F. E.         | 2    |      |
| Cincinnati Museum Ass'n      |      | 1    | Dill, J. B.                 |      | 1    |
| " Pub. Lib'y                 | 4    |      | Dillon, J. F.               |      | 1    |
| " Sch. Supt.                 | 1    |      | District of Columbia Health |      |      |
| Clark, C. C. P.              | 1    |      | Dept.                       | 1    |      |
| " Mrs. J. G.                 | 2    |      | Dodge, D. S.                |      | 1    |
| Cleveland Pub. Lib'y         |      | 1    | " M. G.                     | 1    |      |
| Coal Trade Union             | 1    |      | Dresden Tech. Hochsch.      |      | 1    |
| Cohn, Adolphe                | 8    |      | Drew Theol. Sem.            |      | 1    |
| Colby Coll.                  |      | 3    | Dryden, J. F.               | 1    |      |
| Cole, G. W.                  | 140  | 8    | Dudley, Mrs. L. B.          | 1    |      |
| Colie, Mrs. Daniel           | 1    |      | Dunning, W. A.              | 1    |      |
| College Settlers' Ass'n      |      | 2    | Durham, Knowlton            | 1    |      |
| College Women's Club         |      | 4    | Du Vivier, C. L.            | 16   |      |
| Colorado Diocese             |      | 2    | Earlham Coll.               |      | 3    |
| " Labor Statist. Bur.        | 1    |      | East Orange Educ. Bd.       |      | 1    |
| " State Lib'y                | 2    | 15   | Egbert, J. C., Jr.          |      | 1    |
| " State Normal Sch.          | 1    | 1    | Egleston, Thomas            | 422  |      |
| " Treasurer                  |      | 1    | Ehlers, E. M. L.            | 1    |      |
| Columbia Lit. Monthly        | 3    |      | Elizabeth Coll.             |      | 2    |
| " Morningside                | 3    |      | Elmira Reformatory          |      | 1    |
| " Spectator                  | 10   |      | Emory and Henry Coll.       |      | 1    |
| " Univ. Class of             |      |      | Enoch Pratt Free Library    |      | 1    |
| " 1901                       | 1    |      | Erb, F. W.                  | 1    |      |
| " Univ. Class of             |      |      | Essex Inst.                 |      | 2    |
| " 1902                       | 1    |      | Ex Dono Amici Literarum     | 10   |      |
| " Quarterly                  | 3    |      | Fairchild, Mrs. C. S.       | 1    |      |
| " Sch. of Mines              | 6    |      | Fairlee, J. A.              | 16   |      |
| Com. de Leg. Etrangere       |      |      | Fairmont Coll.              |      | 1    |
| (Paris)                      | 2    |      | Federation of Grad. Clubs   |      | 1    |

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|--------------------------------------|-------|------|--|-------|------|
| Fenollosa, E. F. . . . .             | 1     |      | Howe, H. M. . . . .                    | 9     |      |
| Field Columbian Museum . . . . .     | 1     | 5    | Hrdlicka, Ales. . . . .                |       | 2    |
| Findlay Coll. . . . .                |       | 3    | Humphrey, Miss A. R. . . . .           | 1     |      |
| Fisher, Mr. . . . .                  | 3     |      | Hurley, T. J. . . . .                  | 1     |      |
| Fisk Univ. . . . .                   |       | 2    | Hutton, F. R. . . . .                  |       | 153  |
| Fitchburg City Clerk . . . . .       | 3     |      | Idaho Labor Bur. . . . .               |       | 1    |
| Florida Agric. Coll. . . . .         |       | 4    | Univ. . . . .                          |       | 1    |
| Com. . . . .                         | 6     |      | Illinois Anti-Vivisection Soc. . . . . |       | 12   |
| " Treasurer . . . . .                |       | 4    | Health Bd. . . . .                     | 3     |      |
| Folks, Homer . . . . .               | 1     |      | St. Lab. Nat. Hist. . . . .            |       | 2    |
| Fond du Lac, Diocese of . . . . .    |       |      | Univ. Lib'y . . . . .                  |       | 5    |
| P. E. Ch. . . . .                    |       | 3    | Independ't Labor Party . . . . .       |       | 2    |
| France, Min. de l'Instr. . . . .     | 28    | 21   | Indiana Acad. of Sciences . . . . .    |       | 2    |
| Pub. . . . .                         |       |      | Charit's Bd. . . . .                   |       | 2    |
| " Travail, Office du . . . . .       | 4     |      | Health Bd. . . . .                     | 3     |      |
| Friedman, D. A. . . . .              | 1     |      | Pub. Instr. Supt. . . . .              | 1     |      |
| Gallant, A. E. . . . .               |       | 1    | State Lib'y . . . . .                  | 20    | 39   |
| Garcon, Jules . . . . .              |       | 2    | Ingraham, G. L. . . . .                | 78    |      |
| Garrett, J. H. . . . .               |       | 2    | Inst. of Civil Eng. . . . .            |       | 2    |
| Gates, W. E. . . . .                 |       | 1    | Iowa Acad. of Sciences . . . . .       | 1     |      |
| Gen. Theol. Sem. . . . .             | 1     |      | Adj. Gen. . . . .                      | 1     |      |
| Germantown Friends' Free . . . . .   |       |      | Att'y Gen. . . . .                     | 2     |      |
| Lib'y . . . . .                      |       | 1    | Health Bd. . . . .                     | 3     |      |
| Gerould, J. T. . . . .               |       | 1    | R. R. Com. . . . .                     | 1     |      |
| Gildersleeve, C. E. . . . .          | 1     | 21   | St. Hist. Soc. . . . .                 |       | 1    |
| Glasenapp, P. . . . .                | 3     |      | Italy Min. of Agric. . . . .           | 3     | 4    |
| Gloucester—Auditor . . . . .         | 1     |      | Pub. Instr. Min. . . . .               | 1     | 29   |
| Glouer, Prosper . . . . .            | 1     |      | James Prendergast Free . . . . .       |       |      |
| Goode, E. L. . . . .                 | 1     |      | Lib'y . . . . .                        | 1     |      |
| Goodnow, F. J. . . . .               | 1     |      | Japan Finance Dept. . . . .            | 1     |      |
| Gottheil, Richard . . . . .          | 3     | 720  | Navy Dept. . . . .                     |       | 1    |
| Gould, Miss E. P. . . . .            | 1     |      | Jelliffe, S. E. . . . .                | 1     |      |
| Graunn, Wilhelm . . . . .            | 4     |      | Jena Univ. . . . .                     |       | 1    |
| Gray, L. H. . . . .                  |       | 2    | Jersey City Educ. Bd. . . . .          | 1     |      |
| Grayden, Mrs. Wm. . . . .            | 17    |      | Free Pub. Lib'y . . . . .              |       | 1    |
| Great Britain Geol. Survey . . . . . | 1     | 1    | Johns Hopkins Univ. Lib'y . . . . .    | 2     |      |
| Green, James . . . . .               |       | 2    | Press . . . . .                        | 29    |      |
| S. A. . . . .                        | 2     | 12   | Johnston, W. W. . . . .                | 1     | 1    |
| Griswold, S. B. . . . .              | 7     |      | Joy, B. S. . . . .                     | 1     |      |
| Guild, I. T. . . . .                 | 2     |      | Kalbfleisch, C. C. . . . .             | 7     | 36   |
| Gustavus Adolphus Coll. . . . .      |       | 1    | Kansas City Educ. Bd. . . . .          |       | 1    |
| Haas, G. C. O. . . . .               | 3     |      | Labor Bur. . . . .                     | 2     | 6    |
| Hagerup, H. . . . .                  |       | 1    | Univ. . . . .                          |       | 2    |
| Hague, The, K. K. Bibl. . . . .      |       | 1    | Geol. Survey . . . . .                 | 3     | 2    |
| Hamilton Coll. . . . .               |       | 6    | Kelly, Edmond . . . . .                | 1     |      |
| Hampton Normal Inst. . . . .         |       | 14   | Kent, Prof. . . . .                    | 3     | 18   |
| Hannah, George . . . . .             |       | 1    | Kheron St. Gov't . . . . .             |       | 1    |
| Hartford—Am. Asyl. for . . . . .     |       |      | King, H. C. . . . .                    |       | 1    |
| Deaf and Dumb . . . . .              |       | 15   | Kokovcov, P. . . . .                   | 3     |      |
| Hartford City Clerk . . . . .        | 1     |      | Körösy, Josef . . . . .                |       | 1    |
| Retreat for Insane . . . . .         |       | 10   | Lake Superior Mining Inst. . . . .     |       | 1    |
| Harvard Club . . . . .               | 1     |      | Lane Theol. Sem. . . . .               |       | 1    |
| College . . . . .                    | 1     | 1    | La Plata Museo . . . . .               | 1     |      |
| Museum of Comp. . . . .              |       |      | Lawrence Free Pub. Lib'y . . . . .     |       | 1    |
| Zool. . . . .                        |       | 4    | Lederer, Alison . . . . .              |       | 3    |
| Hascall, T. F. . . . .               | 5     |      | Leipzig Univ. Bibl. . . . .            |       | 1    |
| Haverhill Pub. Lib'y . . . . .       |       | 1    | Leland Stanford Jr. Univ. . . . .      |       | 5    |
| Hebrew Tech. Inst. . . . .           |       | 2    | Levasseur, E. . . . .                  |       | 1    |
| Heidelberg Univ. . . . .             |       | 1    | Lewis Inst. . . . .                    |       | 3    |
| Herbette, Louis . . . . .            | 1     |      | Liberty and Property De- . . . .       |       |      |
| Heron, W. W. . . . .                 |       |      | fence League . . . . .                 |       | 9    |
| Higginson, J. J. . . . .             | 4     |      | Library Bur. (Chic.) . . . . .         |       | 1    |
| Hills, A. K. . . . .                 |       | 12   | Lincoln Pub. Instr. Supt. . . . .      |       | 4    |
| Hindricks, Francis . . . . .         | 1     |      | Univ. . . . .                          | 2     | 12   |
| Hiram Coll. . . . .                  |       | 1    | Little, Thomas . . . . .               | 1     |      |
| Hoffmann, Dean . . . . .             | 2     |      | Liverpool Pub. Lib's Com. . . . .      |       | 1    |
| Holden, E. B. . . . .                | 2     | 166  | London Inst. of Civil Eng. . . . .     | 1     |      |
| E. S. . . . .                        |       |      | Royal Soc. . . . .                     | 5     |      |
| Holland Soc. of N. Y. . . . .        | 480   |      | Univ. . . . .                          | 3     |      |
| Hollick, A. . . . .                  | 3     |      | Louisiana R. R. Com. . . . .           |       | 1    |
| Holla, F. W. . . . .                 | 1     |      | Lourain Univ. . . . .                  |       | 2    |
| Hooker, E. B. . . . .                | 1     |      | Low, Seth . . . . .                    | 324   | 1355 |
| House of Lord Mission . . . . .      |       | 4    | Lumley, Miss E. P. . . . .             | 1     |      |

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| Lyons Univ. . . . .                |       | 5    | Milwaukee Cham. of Com. . . . .    | 1     |      |
| McCurdy, R. A. . . . .             | 1     |      | " Pub. Museum . . . . .            |       | 1    |
| McGill Med. Lib'y . . . . .        |       | 1    | Minneapolis Educ. Bd. . . . .      |       | 1    |
| " Univ. Lib'y . . . . .            |       | 7    | Minnesota Correct. and             |       |      |
| Maclear, J. P. . . . .             | 1     |      | Charit's Bd. . . . .               |       | 2    |
| Macmillan Co. . . . .              | 1     |      | " Health Bd. . . . .               |       | 1    |
| MacMullen, Miss Grace . . . . .    |       | 1    | " St. Normal Sch. . . . .          |       | 1    |
| " Mrs. John . . . . .              | 14    |      | Mississippi Agric. Coll. . . . .   |       | 27   |
| McNeill, Ralph . . . . .           | 268   | 284  | " Health Bd. . . . .               |       | 1    |
| Madras Gov't Museum . . . . .      |       | 2    | Missouri Auditor . . . . .         | 3     |      |
| " Obs. . . . .                     |       | 1    | " Geol. . . . .                    |       | 1    |
| Magrath, J. T. . . . .             |       | 1    | " Health St. Bd. . . . .           | 4     | 2    |
| Maine Labor Bur. . . . .           | 1     |      | " Labor Bur. . . . .               | 1     |      |
| Manchester City Clerk . . . . .    | 1     |      | " Univ. . . . .                    |       | 4    |
| Manitoba Coll. . . . .             |       | 1    | " Valley Coll. . . . .             |       | 1    |
| Marden, O. S. . . . .              |       | 2    | Montana Agric. Bur. . . . .        | 1     |      |
| Marietta Coll. . . . .             |       | 1    | " Labor Bur. . . . .               | 4     | 2    |
| Maryland Educ. Bd. . . . .         | 1     |      | " Sch. for Deaf and                |       |      |
| " Statis. Bur. . . . .             |       | 5    | Blind . . . . .                    |       | 1    |
| Massachusetts Agric. Coll. . . . . |       | 68   | Moore, Charles . . . . .           |       | 1    |
| " St. Bd. . . . .                  | 8     | 8    | " J. B. . . . .                    |       | 1    |
| " Anc. and Hon. . . . .            |       |      | Mott, J. R. . . . .                | 1     |      |
| " Artillery Co. . . . .            |       | 2    | Mt. Auburn Cemetery . . . . .      |       | 1    |
| " Auditor . . . . .                | 1     |      | " Holyoke Coll. . . . .            |       | 21   |
| " Charity Bd. . . . .              | 1     |      | " St. Mary's Coll. . . . .         |       | 12   |
| " Civil Service . . . . .          | 1     |      | Munich Akad. d. Wissen. . . . .    |       | 8    |
| " Com. . . . .                     |       |      | " Fleischmann's Roy. . . . .       |       |      |
| " Diocese of P. . . . .            |       | 1    | Art Gallery . . . . .              |       | 1    |
| " E. Ch. . . . .                   |       |      | Nat. Arboretum u. Alpen-           |       |      |
| " District Police . . . . .        | 2     |      | garten . . . . .                   |       | 1    |
| " Educ. Bd. . . . .                | 2     |      | " Cathedral Sch. for               |       |      |
| " Free Pub. . . . .                |       |      | Girls . . . . .                    |       | 1    |
| " Lib'y . . . . .                  |       | 7    | Nat. Civil Service Reform          |       |      |
| " Gas and Elec- . . . .            |       |      | League . . . . .                   |       | 3    |
| " tric Light . . . . .             |       |      | " Elec. Light Ass'n . . . . .      | 1     |      |
| " Com. . . . .                     | 1     |      | Nebraska Pub. Instr. Supt. . . . . |       | 7    |
| " Gen. Hospi- . . . .              |       | 1    | " Univ. . . . .                    |       | 2    |
| " tal . . . . .                    |       |      | Nelson, C. A. . . . .              |       | 2    |
| " Harbor and . . . . .             |       | 15   | Neumann, Edward . . . . .          | 2     |      |
| " Land Com. . . . .                | 2     |      | Nevada Pub. Instr. Supt. . . . .   |       | 1    |
| " Health Bd. . . . .               | 1     |      | New Brunswick Educ. Supt. . . . .  |       | 3    |
| " Insanity Bd. . . . .             | 1     |      | New England Soc. . . . .           |       | 3    |
| " Inst. of Tech. . . . .           |       | 2    | New Hampshire Asyl. for            |       |      |
| " Ins. Com. . . . .                | 2     |      | Inane . . . . .                    | 3     | 10   |
| " Labor Bur. . . . .               |       | 1    | " Health Bd. . . . .               | 4     |      |
| " Prisons, Com. . . . .            | 1     |      | " Ins. Com. . . . .                |       | 6    |
| " Savings Bks. . . . .             | 2     |      | " Lib'y Com. . . . .               |       | 9    |
| " Sec. of St. . . . .              | 1     | 28   | " St. Lib'y . . . . .              | 113   | 60   |
| " Topogr. Sur- . . . .             |       |      | " Treasurer . . . . .              | 1     |      |
| " vey . . . . .                    | 6     | 4    | New Haven Colony Hist.             |       |      |
| " Treasurer . . . . .              | 1     | 1    | Soc. . . . .                       |       |      |
| Matthews, Brander . . . . .        | 13    | 350  | New Jersey Adj. Gen. . . . .       | 1     |      |
| Melbourne Univ. . . . .            | 1     |      | " Ass'res Bd. . . . .              | 1     |      |
| Merck, E. . . . .                  |       | 1    | " Banking and . . . . .            |       |      |
| Mercy, Heinr. Sohn . . . . .       | 1     |      | Ins. Com. . . . .                  | 33    |      |
| Mérou, E. G. . . . .               | 6     | 3    | " Diocese . . . . .                |       | 1    |
| Mertens, Ludwig . . . . .          | 1     |      | " Educ. Bd. . . . .                | 1     |      |
| Messina Univ. . . . .              | 1     |      | " Fact's Insp. . . . .             | 1     |      |
| Michigan Adj. Gen. . . . .         | 1     |      | " Geol. Survey . . . . .           | 2     |      |
| " Agric. Coll. . . . .             |       | 3    | " Labor Bur. . . . .               | 1     |      |
| " Auditor . . . . .                | 1     |      | " Quartermaster . . . . .          |       |      |
| " Correct. and Char- . . . .       |       |      | Gen. . . . .                       | 1     |      |
| ities . . . . .                    | 1     |      | " St. Lib'y . . . . .              | 2     |      |
| " Health Bd. . . . .               | 1     | 1    | " Rifle Ass'n . . . . .            |       | 1    |
| " Ind. Sch. . . . .                | 1     | 19   | " Treas. . . . .                   | 1     |      |
| " Labor Bur. . . . .               | 1     |      | New South Wales Geol. Sur-         |       |      |
| " Pub. Instr. . . . .              | 2     |      | vay . . . . .                      |       | 1    |
| " Sch. masters Club . . . . .      |       | 1    | " Gov. Bd. . . . .                 |       |      |
| " St. Lib'y . . . . .              | 39    | 49   | " Int. Ex. . . . .                 | 83    | 17   |
| " Treas. . . . .                   | 1     |      | " Mines and . . . . .              |       |      |
| " Univ. Lib'y . . . . .            | 1     | 15   | Agric. . . . .                     |       |      |
| Miller, E. H. . . . .              |       | 1    | Min. . . . .                       | 13    | 3    |
| " J. F. . . . .                    |       | 1    | N. Y. City Accts. Com. . . . .     | 1     | 1    |

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| N. Y. City Ass'n for Imp. |       |      | N. Y. City St. George's Soc. |       | 1    |
| Condit'n of               |       |      | St. Zita's Home .            |       | 1    |
| Poor . . . . .            |       | 1    | " Sch'masters'               |       |      |
| " Baptist Home            |       |      | " Ass'n . . . . .            |       | 4    |
| " Soc. . . . .            |       | 1    | " Sheltering Arms            |       | 1    |
| " Bar Ass'n . . . .       | 1     |      | " Soc. P. C. C. . . .        |       | 1    |
| " Bl'gdale Day            |       |      | " Lib'y . . . . .            |       | 1    |
| " Nursery . . . .         |       | 1    | " " of N.Y.Hos-              |       |      |
| " Bot. Garden . . .       | 6     | 2    | " pital . . . . .            |       | 1    |
| " Calvary Church .        |       | 1    | " Str Clean'g Dept.          | 1     | 6    |
| " Charit's Aid            |       |      | " Taxes and Assess.          |       |      |
| " Ass'n . . . . .         |       | 2    | " Dept. . . . .              | 16    | 4    |
| " Charity Organ.          |       |      | " Univ. Club . . . .         |       |      |
| " Soc. . . . .            |       | 1    | " " Settlement               | 1     | 1    |
| " Charter Rev.            |       |      | " Vet. Corps of              |       |      |
| " Com. . . . .            | 9     | 6    | " Artillery . . . .          |       | 1    |
| " Ch. of Heavenly         |       |      | " Y. M. C. A. . . .          | 1     | 1    |
| " Rest . . . . .          |       | 1    | " Y. W. C. A. . . .          |       | 1    |
| " City Lib'y . . . .      | 20    |      | N. Y. St. Bank'g Dept. .     | 2     |      |
| " Columbus Hospi-         |       |      | " Bar Ass'n . . . .          | 8     |      |
| " tal . . . . .           |       | 1    | " Chamber of Com. .          | 1     |      |
| " Diet Kitchen            |       |      | " Charit's Aid Ass'n         |       | 2    |
| " Ass'n . . . . .         |       | 1    | " Bd. . . . .                | 3     | 1    |
| " Educ. Bd. . . . .       | 6     |      | " Civil Service Ass'n        |       | 1    |
| " Eng. Club . . . .       | 1     |      | " " Com. . . . .             | 1     |      |
| " Foundling Hos-          |       |      | " Com. of Statut'y           |       |      |
| " pital . . . . .         |       | 1    | " Rev. . . . .               | 4     |      |
| " Friendly Aid . . .      |       | 1    | " Comptroller . . .          | 2     |      |
| " Gen. Mem. Hos-          |       |      | " Elect. Supt. . . .         |       | 1    |
| " pital . . . . .         |       | 1    | " Eng. and Surveyor          | 6     |      |
| " Gen. Soc. of Mech.      |       |      | " Health Bd. . . . .         | 2     |      |
| " and Tradesmen           |       | 1    | " Historian . . . .          | 6     |      |
| " Grace Ch. Vestry        |       |      | " Hist. Ass'n . . . .        | 1     |      |
| " Health Dept. . . .      | 7     | 2    | " Ins. Dept. . . . .         | 2     |      |
| " Highways Dept.          | 8     |      | " Labor Bur. . . . .         | 1     |      |
| " Homeop. Med.            |       | 3    | " Legislature . . . .        |       | 1    |
| " Coll. . . . .           |       | 1    | " Lib'y . . . . .            | 9     | 2    |
| " House of the An-        |       |      | " Lunacy Com. . . .          | 2     |      |
| " nunciation . . . .      |       | 1    | " Mediation and Ar-          |       |      |
| " Inf. for Women          |       |      | " bitr. Bd. . . . .          | 1     |      |
| " and Children . . .      |       | 1    | " Printers . . . . .         | 60    |      |
| " Inst. for Deaf          |       |      | " Pub. Instr. Dept.          | 1     |      |
| " and Dumb . . . .        |       | 1    | " R. R. Com. . . . .         | 2     | 1    |
| " Kindergarten            |       |      | " Reservation at             |       |      |
| " Ass'n . . . . .         |       | 2    | " Niagara, Conn.             |       | 1    |
| " Law Dept. . . . .       | 8     |      | " Sec. of St. . . . .        | 8     |      |
| " Lisa Day Nur-           |       |      | " Syracuse Inst. . .         |       | 1    |
| " sery . . . . .          |       | 1    | " Tax. Com. . . . .          | 1     | 2    |
| " Mad. Ave. Ref.          |       |      | " Univ. . . . .              | 2     | 13   |
| " Ch. . . . .             | 1     | 1    | N. Y. C. & H. R. R. . .      | 2     |      |
| " Manh't'n Eye            |       |      | " Life Ins. Co. . . .        |       | 1    |
| " and Ear Hospi-          |       |      | " Metal Ex. . . . .          | 1     |      |
| " tal . . . . .           |       | 1    | " Trade Sch. . . . .         |       | 1    |
| " Mercantile Lib'y        |       |      | " Zool. Soc. . . . .         |       | 1    |
| " Merchants' Ass'n        | 2     | 1    | New Zealand Mines Dept.      | 6     |      |
| " Midnight Mission        |       |      | Newark Academy . . .         |       | 1    |
| " No. Eastern Dis-        |       | 2    | " Educ. Bd. . . . .          |       | 1    |
| " pens'y . . . . .        |       | 1    | " Free Pub. Lib'y            |       | 2    |
| " Orphans Home            |       |      | " St. Michael's Hos-         |       | 1    |
| " and Asyl. . . . .       |       | 1    | " pital . . . . .            |       |      |
| " Penn. Soc. . . . .      | 1     |      | Newberry, J. S. (from his    |       |      |
| " Produce Ex. . . .       | 1     |      | " Lib'y) . . . . .           | 1     |      |
| " Provident Loan          |       |      | " Newton City Clerk .        | 3     |      |
| " Soc. . . . .            |       | 1    | " Noa, Mr. . . . .           |       | 6    |
| " Pub. Bldgs. Com.        |       | 4    | " Non-Partisan Voters' Union |       | 2    |
| " Pub. Improve-           |       |      | " No. Car. Corpor. Com. .    | 1     |      |
| " m'ts Bd. . . . .        | 3     |      | " Labor Bur. . . . .         | 8     |      |
| " Roosevelt Hos-          |       |      | " No. Dakota Att'y Gen. .    |       | 2    |
| " pital . . . . .         |       | 1    | " No. Hampton City Clerk     | 2     |      |
| " St. Bartholom-          |       |      | " Nova Scotia Mines Dept.    |       | 1    |
| " ew's Parish . . . .     |       | 1    | " Provin. Sec. . . . .       | 2     |      |
| " St. Francis Hos-        |       |      | Ogilvie, Mrs. I. H. . .      | 43    | 1    |
| " pital . . . . .         |       | 1    | " J. S. Pub. Co. . . .       | 1     |      |



|                                   | Vols. | Pam. |                                      | Vols. | Pam. |
|-----------------------------------|-------|------|--------------------------------------|-------|------|
| Ohio Bar Ass'n . . . . .          | 1     |      | Rees, J. K. . . . .                  | 1     |      |
| " Charit's Bd. . . . .            |       | 4    | Reform Club . . . . .                | 5     | 64   |
| " Health Bd. . . . .              | 2     | 1    | Rhode Isl. Charities Bd. . . . .     |       | 1    |
| " Labor. Bur. . . . .             | 1     | 4    | " Dams and Reser-                    |       |      |
| " Mod. Lang. Ass'n . . . . .      |       | 3    | voirs Com. . . . .                   |       | 18   |
| " R. R. Com. . . . .              | 1     |      | " Factory Insp. . . . .              | 2     | 2    |
| " St. Lib'n . . . . .             |       | 11   | " Harbor Com. . . . .                |       | 15   |
| " Univ. . . . .                   |       | 4    | " Health Bd. . . . .                 | 1     |      |
| " Workshops Insp. . . . .         | 1     |      | " Indust. Stat. Bur. . . . .         | 9     | 1    |
| Ontario Indust. Bur. . . . .      | 1     | 1    | " Fisheries Com. . . . .             |       | 11   |
| Order of the Golden Age . . . . . |       | 1    | " Ins. Com. . . . .                  | 4     |      |
| Oregon Treas. Dept. . . . .       | 1     |      | " Phar. Bd. . . . .                  |       | 7    |
| Otago Daily Times . . . . .       | 1     |      | " Pub. Sch. Com. . . . .             | 1     |      |
| Ottawa Lit. and Sci. Soc. . . . . |       | 1    | " R. R. Com. . . . .                 | 1     | 8    |
| Otterbein Univ. . . . .           |       | 1    | " Registrat. Bur. . . . .            | 1     |      |
| Pacific Univ. . . . .             |       | 1    | " Soldiers' Relief                   |       |      |
| Padua Univ. . . . .               | 1     | 1    | Bd. . . . .                          | 4     |      |
| Park Coll. . . . .                |       | 1    | " Treas. . . . .                     | 1     | 21   |
| Parker, H. C. . . . .             | 1     |      | Richards, Mrs. E. H. . . . .         | 1     |      |
| Parsons, I. D. . . . .            |       | 8    | Richmond Coll. . . . .               |       | 3    |
| " W. B. . . . .                   | 119   | 64   | Rivista Min. Metal . . . . .         | 1     |      |
| Patholog. Soc. . . . .            | 33    |      | Robinson, J. H. . . . .              | 1     |      |
| Peabody Inst. Lib'y . . . . .     | 1     |      | Rochester Univ. . . . .              |       | 1    |
| Peace Ass'n of Friends . . . . .  |       | 1    | Roe, A. S. . . . .                   | 1     |      |
| Peck, Wallace . . . . .           |       | 1    | Roebing, Mrs. W. A. . . . .          | 1     |      |
| Peddle Inst. . . . .              |       | 1    | Rome Pub. Instr. Min. . . . .        | 4     | 10   |
| Penn. Factory Insp. . . . .       | 1     |      | Rose Polytech. Inst. . . . .         |       | 1    |
| " Health Bd. . . . .              | 4     |      | Ross, Miss E. N. . . . .             | 2     |      |
| " Hist. Soc. . . . .              |       | 1    | Royal Coll. of Surgeons . . . . .    | 2     |      |
| " Ins. Com. . . . .               | 3     |      | " Holloway Coll. . . . .             | 1     |      |
| " Int. Affairs Sec. . . . .       | 2     |      | " Inst. of Br. Architects            |       | 9    |
| " Museum Sch. of Ind.             |       |      | " Soc. of London . . . . .           | 4     |      |
| " Art. . . . .                    |       | 1    | Russia Min. de l'Intérieur . . . . . |       | 3    |
| " Prison Soc. . . . .             |       | 1    | " Min. of Marine . . . . .           | 2     |      |
| " R. R. Com. . . . .              |       | 1    | " Sec. of Communicat.                | 3     |      |
| " Sch. of Ind. Art . . . . .      |       | 11   | Russian Jour. Office . . . . .       | 1     |      |
| " Soc. of Sons of Revo-           |       |      | Rutgers Coll. . . . .                |       | 1    |
| lution . . . . .                  | 1     |      | St. Benedict's Coll. . . . .         |       | 1    |
| " St. Lib'y . . . . .             | 44    |      | " Bernard Coll. . . . .              |       | 1    |
| " St. Normal Sch. . . . .         |       | 27   | " Ignatius Coll. . . . .             |       | 2    |
| " Treasurer . . . . .             | 4     |      | St. Louis Mercantile Lib'y           |       |      |
| " Univ. . . . .                   | 1     | 14   | Assn. . . . .                        |       | 1    |
| Purdue Univ. . . . .              |       | 2    | " Univ. . . . .                      |       | 1    |
| Parkins Inst. . . . .             | 9     | 52   | St. Mark's Ch. . . . .               | 1     |      |
| Peterson, Miss . . . . .          |       | 1    | St. Olaf. Coll. . . . .              |       | 1    |
| Phi Beta Kappa . . . . .          | 1     |      | St. Xavier Coll. . . . .             |       | 1    |
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| " Fairmount Park Art              |       |      | Saxony Statist. Bur. . . . .         |       | 1    |
| Ass'n . . . . .                   |       | 1    | Schneider, Albert . . . . .          | 2     |      |
| " Free Lib'y . . . . .            |       | 2    | Seabury, W. J. . . . .               | 2     |      |
| " Lib'y Co. . . . .               |       | 2    | Seligman, E. R. A. . . . .           | 144   | 476  |
| " Pub Educ. Bd. . . . .           | 1     |      | Seneca Co. Supervisors Bd.           |       | 1    |
| Philippine Inform. Soc. . . . .   |       | 2    | Shakspere Soc. (Phila.) . . . .      |       | 1    |
| Phillips Exeter Acad. . . . .     |       | 1    | Shaw, G. A. . . . .                  |       | 2    |
| Philos. Soc. of Wash. . . . .     | 1     | 7    | Simkhovitch, W. G. . . . .           | 2     | 1    |
| Pine, J. B. . . . .               | 4     |      | Simmons, I. K. . . . .               | 2     |      |
| Pittsburg Chamber of Com. . . . . | 1     |      | Simms, Joseph . . . . .              | 1     |      |
| Planten, J. R. . . . .            | 64    | 21   | Simonson, Gustav . . . . .           | 24    | 6    |
| Political Sci. Quar. . . . .      | 57    | 10   | Smith, D. T. . . . .                 | 1     |      |
| Poole, Herman . . . . .           |       | 13   | " E. R. . . . .                      | 1     |      |
| Porter, P. A. . . . .             |       | 1    | " W. W. . . . .                      |       | 147  |
| Prall, Wm. . . . .                | 1     |      | Smithsonian Inst. . . . .            | 10    | 35   |
| Prince Edward's Island Leg.       | 1     |      | Soc. Belge de Microscopie . . . . .  |       | 1    |
| Princeton Theol. Sem. . . . .     |       | 2    | " d'Ethnographie . . . . .           | 1     |      |
| " Univ. Lib'n . . . . .           | 1     |      | " of Mayflower Descend-              |       |      |
| P. E. Ch. of Albany . . . . .     |       | 1    | ants . . . . .                       | 1     |      |
| Prussia Staats-archiv ver-        |       |      | So. Carolina Health Bd. . . . .      |       | 1    |
| waltung . . . . .                 | 1     |      | " Dakota Att'y Gen. . . . .          |       | 1    |
| Pumpelly, J. C. . . . .           | 1     | 1    | " Treas. . . . .                     |       | 2    |
| Putnam's Sons, G. P. . . . .      | 1     | 1    | " Auditor . . . . .                  | 1     |      |
| Queensland Audit. Dept. . . . .   |       | 1    | " Pub. Instr. Supt. . . . .          | 1     | 1    |
| " Museum . . . . .                |       | 1    | Sparkuhl, Karl . . . . .             |       | 1    |
| " R. R. Com. . . . .              |       | 1    | Spitzka, E. A. . . . .               |       | 1    |

|  | Vols. | Pam. |  | Vols. | Pam. |
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| Spingarn, J. E. . . . .                | 2     | 3    | Univ. of Harriman . . . . .                      |       | 1    |
| Seisco, L. D. . . . .                  | 1     |      | Upsala Univ. . . . .                             | 4     |      |
| Stedman, T. L. . . . .                 | 100   | 25   | Vail, Miss . . . . .                             | 2     |      |
| Stephens, Miss Kate . . . . .          |       | 18   | Van Amringe, J. H. . . . .                       | 12    | 75   |
| Stewart, Miss C. T. . . . .            |       | 1    | Vanderheyden, P. P. . . . .                      | 2     |      |
| " R. L. . . . .                        | 1     |      | Veiller, Lawrence . . . . .                      |       | 1    |
| Stillman, C. . . . .                   |       | 12   | Vermilye, D. B. . . . .                          | 1     |      |
| Stocher, Robert . . . . .              | 3     |      | Vermont Agric. Ex. Stat'n . . . . .              | 2     | 1    |
| Stockholm K. Bibl. . . . .             |       | 4    | " Finance Imp. . . . .                           | 2     |      |
| Stonyhurst Coll. Obs. . . . .          |       | 1    | " Hist. Soc. . . . .                             |       | 1    |
| Strauss, C. A. . . . .                 | 2     |      | " Ins. Dept. . . . .                             | 1     |      |
| Strebeigh, Lefferts . . . . .          | 2     | 2    | " Lib'y Com. . . . .                             | 6     | 3    |
| Sturgia, Russell . . . . .             | 7     |      | " Treas. . . . .                                 | 1     | 1    |
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| " Pub. Lib'y . . . . .                 |       | 1    | " Univ. (Toronto) . . . . .                      | 1     |      |
| " Univ. . . . .                        |       | 1    | Vienna Geol. Reichsanstalt . . . . .             |       | 1    |
| Teachers Coll. . . . .                 | 17    |      | " K. K. Handels-Min. . . . .                     | 1     | 1    |
| " Guild of Gt. Brit. . . . .           |       | 3    | " Univ. Bibl. . . . .                            |       | 5    |
| Tennessee Labor Bur. . . . .           |       | 2    | Virginia Hist. Soc. . . . .                      |       | 1    |
| Tewksbury St. Almshouse . . . . .      |       | 1    | Walsh, C. M. . . . .                             | 1     |      |
| Texas Agric. Ex. Stat'n . . . . .      |       | 1    | Ward, Henry . . . . .                            |       | 2    |
| Thiel Coll. . . . .                    |       | 1    | Warner & Sweeney, Messrs. . . . .                | 1     |      |
| Thomas, Calvin . . . . .               | 4     |      | Washburn Coll. . . . .                           |       | 1    |
| Tiepke, H. E. . . . .                  | 1     |      | Washington (State) Labor Bur. . . . .            | 1     |      |
| Tokio Educ. Dept. . . . .              |       | 4    | Webb's Acad. and Home for Shipbuilders . . . . . |       | 2    |
| " Imp. Univ. . . . .                   | 1     | 1    | Western Reserve Univ. . . . .                    |       | 1    |
| " Lib'y . . . . .                      | 1     |      | Westminster Coll. . . . .                        |       | 1    |
| Toronto Astron. Soc. . . . .           |       | 1    | Willard St. Hospital . . . . .                   | 2     | 4    |
| " Pub. Lib'y . . . . .                 |       | 1    | Willetts, Mrs. C. M. . . . .                     | 1     |      |
| " Univ. . . . .                        | 2     |      | William Jewell Coll. . . . .                     |       | 2    |
| Torrey Bot. Club . . . . .             | 13    |      | Williams Coll. Lib'y . . . . .                   |       | 4    |
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| Toulouse Univ. Bibl. . . . .           |       | 1    | " Health Bd. . . . .                             | 2     | 1    |
| Townsend, T. S. . . . .                | 1     |      | " Hist. Soc. . . . .                             | 1     |      |
| Trent, W. P. . . . .                   | 1     |      | " Labor Bur. . . . .                             |       | 4    |
| Trenton Pub. Instr. Com. . . . .       |       | 1    | " Sch. for Deaf . . . . .                        |       | 3    |
| Trowbridge, A. B. . . . .              | 1     |      | " St. Bd. of Control . . . . .                   | 1     |      |
| Tubingen Univ. . . . .                 |       | 5    | " Univ. . . . .                                  |       | 1    |
| Tufts Coll. . . . .                    |       | 1    | Wise, S. S. . . . .                              | 584   |      |
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| " Agric. Dept. . . . .                 | 3     | 23   | Woman's Coll. (Balt.) . . . . .                  |       | 8    |
| " Coll. . . . .                        |       | 3    | Women's Trades Union League . . . . .            |       | 1    |
| " Congress Lib'y . . . . .             | 76    |      | Wood, Arnold . . . . .                           |       | 1    |
| " Currency Comptroller . . . . .       | 2     |      | " Benjamin . . . . .                             | 2     |      |
| " Educ. Bur. . . . .                   | 4     | 4    | Woodward, B. D. . . . .                          | 124   | 274  |
| " Foreign Com. Bur. . . . .            | 1     |      | " R. S. . . . .                                  |       | 59   |
| " Geol. Survey . . . . .               | 5     | 15   | Worcester Acad. . . . .                          |       | 1    |
| " Ind. Com. . . . .                    | 7     |      | " Co. Law Lib'y . . . . .                        |       | 1    |
| " Interior Dept. . . . .               | 31    | 31   | Wyoming Agric. Ex. Stat'n . . . . .              |       | 2    |
| " Internat. Commerce Com. . . . .      | 2     |      | Yale, L. M. . . . .                              | 1     |      |
| " Justice Dept. . . . .                |       | 5    | " Univ. . . . .                                  | 1     |      |
| " Labor Com. . . . .                   | 1     | 1    | Yamada, S. . . . .                               |       | 2    |
| " Legation (Vienna) . . . . .          | 40    | 30   | Yankton Coll. . . . .                            |       | 2    |
| " Naval Obs. . . . .                   | 2     |      | Giver Unknown . . . . .                          | 100   | 6    |
| " Patent Office . . . . .              | 2     | 1    | Rine, L. A. . . . .                              | Map   |      |
| " St. Dept. . . . .                    | 13    | 19   |  |       |      |
| " Supt. of Doc. . . . .                | 266   | 218  |  |       |      |
| " Treas. Dept. . . . .                 | 10    |      |  |       |      |
| " War Dept. . . . .                    | 12    | 5    |  |       |      |
|  |       |      |  | 6483  | 9535 |

# THE GYMNASIUM

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## REPORT OF THE DIRECTOR

FOR THE YEAR ENDING JUNE 30, 1901

*To the President of Columbia University  
in the City of New York:*

SIR:

I have the honor to submit the following report of the work of the Gymnasium Department for the academic year 1900-1901.

The staff of the department has comprised:

|                                  |  |
|----------------------------------|--|
| WATSON L. SAVAGE, A.M., M.D..... | <i>Director.</i>                         |
| GUSTAV H. BOJUS.....             | <i>Instructor in Gymnastics.</i>         |
| GEORGE R. SEIKEL.....            | <i>Assistant Instructor and Pianist.</i> |
| CHARLES HOLROYD.....             | <i>Instructor in Swimming.</i>           |
| WILLIAM F. HILLS.....            | <i>Secretary.</i>                        |
| CHARLES KNEIFF.....              | <i>Rail Office Clerk.</i>                |
| WALTER WATSON.....               | <i>Instructor in Boxing.</i>             |
| JAMES MURRAY, Jr.....            | <i>Instructor in Fencing.</i>            |

From October 1st to June 8th the gymnasium remained open on regular week days from 9.30 A.M. to 7 P.M.; Saturdays, to 6 P.M.; and during vacation periods and on legal holidays, from 2 to 6 P.M. The first two weeks were devoted to the physical examination of the men in the Freshman College and the First-year Science classes. The regular work of the required courses immediately followed and continued during the year until April 18th. In order to avoid conflict in courses and give greater freedom of hours to the students, an extra class was formed for instruction on Mondays and Wednesdays. This class served another valuable purpose

in reducing the size of the regular divisions, which grow considerably larger year by year, and thus made it possible to give more individual attention to their members. In the light of experience, the policy in the required work was somewhat changed by giving exercises that were few in number but of a more vigorous nature, and by excluding movements which were intricate and difficult to perform and also consumed considerable time in explanation and instruction. In this way the students were kept constantly in action during the limited time at their disposal, and the exercises were varied as far as possible within the above lines. In the swimming department, 59 students in the required courses were taught to swim, and a very large number of the general student body was given advanced instruction in swimming.

The attendance in the regular courses has been much better than in the past, and the results obtained by the students, as indicated by the statistics taken at the beginning of the course, and again at the end of the second year's work, are most satisfactory. The complete averages of two classes—those of 1902 and of 1903—are appended to this report. The measurements show a normal, healthy growth, but the statistics of increased power and capacity in the student, as shown in the strength test, are very remarkable, and demonstrate clearly the value of the work as planned and conducted by the instructors in the Department, for, while the growth is not unusual, that which indicates both the harmonious use and the power of coördination of the nerves and of the muscular system, namely, the capacity for execution, is far in excess of the untrained and natural rate of increase. To illustrate this fact in figures, our statistics show that this natural increase for one year in strength is an average of 80 points, while the increase under the system of training here in use shows that the average increase in twelve months of actual work for several classes is as follows:

|                                     |                                   |
|-------------------------------------|-----------------------------------|
| 1902 College, 222.6 points (45%).   | 1902 Science, 246 points (43%).   |
| 1903 College, 246.4 points (43.4%). | 1903 Science, 242.9 points (39%). |

It is also interesting to note by way of comparison that

at the end of the first season in the new gymnasium (1898-1899) the average of the fifty best men in the University—which, by the way, was the second best average of the American universities that took part in the contest—was 1001 points, while the entire class of 1903 Science at the end of this season has the high average of 867.6 points. The University fifty for this year, which is now the best intercollegiate fifty, has also registered a much greater strength than before, having an average of 1305.4 points. These figures show most graphically and most conclusively the wisdom of the Trustees in making gymnastics compulsory during the first two years of college, for no one for a moment would question the value of the increased physical power and nervous energy here demonstrated. The improvement to the student is noticeable not alone in his measurements and in his vital capacity, but particularly and with great satisfaction is it noted in the internal organs, as observed in the examination of the eyes, the heart, and the lungs.

The policy has been pursued by the department with the consent of the Deans to accept athletic training on the various teams of the University through the report of their managers as an equivalent for one-half of the required work of the department, but believing as I do that all-round, general body-building, such as can be obtained only by a systematic course in the gymnasium, is the foundation necessary for successful specialization, I have insisted upon the remaining half-year of this general training as for the best good of the athlete. This gives an opportunity to gain also a knowledge of the proper methods of exercise, of the use of the gymnasium, as well as of the necessary elements of self-preservation, such as swimming, wrestling, and self-defence. Numerous instances have come under my observation in which I have declined to permit members of the Freshman class to participate in athletic contests, and advised, instead, a careful, progressive course of preparation, which resulted in their passing an acceptable physical examination later in the course or at the end of the Sophomore year.

In our files we have at the present time statistical records of over 1500 students, and these are now becoming valuable

to post-graduates and to those in other departments of the University. During the past year I have begun making another record, which I hope will become valuable in the future for comparative and statistical purposes,—namely, marking the students at the beginning and at the end of the year upon their physical condition and their capacity to execute, in order that at some future time we may compare their physical marking with their mental, to ascertain, if possible, the correlation between the mental and the physical capacity of students. This mark is independent of a term mark given the student, which is based upon his attendance and faithfulness to duty only, and is therefore somewhat misleading as an indication of his physical condition.

At the invitation of the exhibition committee of the American Association for the Advancement of Physical Education, which held its convention in New York during April 18th, 19th, and 20th, the class of 1903 gave an exhibit of class wrestling that was commented upon by the delegates from all over the country present as being one of the most instructive and interesting exhibitions of that convention. The gymnastic team, which is the most direct representative of the department in athletics, gave during the winter, by special invitation, exhibitions at Newark Academy, Haverford, Rutgers, and Amherst Colleges; provided an entertainment for the Naval Cadets of the French training ship *Duguay Trouin*; and participated in two contests, one of them with Yale University, in which our team won first place in every event, and the other an intercollegiate contest, in which we were awarded second place. In addition, the team held a successful contest for the university championship. The basketball team, also a direct product of the gymnastic work, although organized for the first time, played a number of games, of which the University games resulted as follows:

|           |    |          |    |
|-----------|----|----------|----|
| Princeton | 38 | Columbia | 21 |
| Harvard   | 11 | "        | 9  |
| Brown     | 10 | "        | 8  |
| Princeton | 6  | "        | 9  |

The Swimming Association organized a water-polo team and challenged all the other universities having a swimming

pool to participate in a contest, but as it was unable to get any of them to compete, we have the inglorious honor of claiming the championship without contest. A relay team was formed, however, composed of four men who swam a race with Yale in our own pool and were defeated by a very narrow margin of six inches in record time. A very successful series of games was held in the pool, the champion of which recently won second place in the mile race at Buffalo inside of world's-record time. It is of interest to add that he began his swimming at the Columbia pool and received all his teaching from our own instructor.

It is interesting and satisfactory to note that, while the novelty of the gymnasium has worn off, the attendance and the use have steadily increased. A new method was instituted during the year for keeping a record of the use of the gymnasium by means of a tally machine, which showed the gratifying attendance of 58,312 during the months from October to May inclusive. The number of students using the pool during the season was 22,825, being an increase of 3400 over last year. In addition to the required work, the optional class, open to all students of the University and held between 5 and 6 P.M., had an average daily attendance of 22. During the year there have been no serious accidents either in connection with the gymnasium work or in the swimming pool. Of the more serious injuries that were dressed in the Director's office most were the result of the class rushes. Other records may be found in the Appendix. From a consideration of the statistics, five important facts present themselves: The number of students who use the gymnasium, the number of students who consult the Director for physical conditions, and the number of examinations have all increased; while the number of visitors has fallen off approximately one-half, and the number of officers using the gymnasium, I particularly regret to report, has greatly diminished.

This year, the women students of the University were admitted in the evening to the use of the gymnasium and the swimming pool, and 98 took advantage of the optional courses that were formed for Monday and Thursday evenings,

commencing February 4th. There was an average attendance on the gymnasium floor of 30; 28 were taught to swim; and 78 made more or less use of the pool, with an average attendance of 25 a night. It would seem with the increasing number of women students in the University, and in view of the new Teachers College dormitory, which will naturally bring a greater number of students within access of the gymnasium at night, that, until other provision can be made, two nights should be reserved for their use, and that a special appropriation should be made for their care and instruction, or the fee be made sufficiently large to cover more nearly the expense involved.

In closing I would say that the department has run very smoothly, and all the present force has been reengaged for the coming year. I should like to offer for your consideration two suggestions, the first of which is, that the gymnasium be thrown open to the officers of the University without fee. The experience of the past year demonstrates that the revenue from this source is very small and not to be compared with the possible benefit to the University of a more general use of the advantages by its officers, and although the fee is a small one it no doubt prevents a large number of the officers from making an occasional use of the gymnasium. The difficulty that was thought might arise as to lockers I can now see my way clear to overcome. As a second suggestion, I would recommend that the athletic organizations be permitted to charge admission to the contests held in the gymnasium. The rule prohibiting such charge operates severely against our own students from the standpoint of time, expense, and success, in that it requires them to go away from home for all their games and to meet their opponents on strange territory; deprives them of the support of their fellow students as well as the legitimate revenue from their contests when held on the home grounds; and affects directly and particularly the student associations which do not ask for aid from the general student body, namely, the Fencing, the Swimming, the Basket-ball, and the Gymnastic teams.

With regard to the condition and use of Columbia Oval,



I would say that the repairs started last year are now complete. The city street across the south end of the grounds has been cut, and a new trolley line is in operation from 129th Street and Third Avenue to the foot of the hill near the Oval, thus making the field somewhat more accessible than in the past. As the season advanced it was found necessary to restore the fence, but owing to the greater expense of construction as well as the uncertainty of the future of the grounds, it was thought inadvisable to follow the street lines and best to enclose only such part of the field as was required for athletic purposes. It is interesting to note that the fence was replaced without extra appropriation.

During the season the Oval has been used by the Track and the Lacrosse Associations and, occasionally, by other class teams. The outside organizations that made use of the field were the Columbia Oval Cricket Club, Trinity, Drisler, Craigie, Sachs, De La Salle Schools, and the High School League, the total revenue derived from these games amounting to \$600.

This income from the use of the field has increased over last year, but not to the extent I think it should and hope it will during the season coming. There is a feeling general among the student body that the Oval is inaccessible and so of little use. But until something permanent is provided near by, it seems necessary to keep the grounds in condition for such use as the various organizations can make of it from time to time.

Respectfully submitted,

WATSON L. SAVAGE,

*Director of the Gymnasium.*

# AVERAGE MEASUREMENTS

|                                    |                                   | 1902 COLLEGE |         |  | 1902 SCIENCE |         |  | 1903 COLLEGE |         |  | 1903 SCIENCE |         |  |
|------------------------------------|-----------------------------------|--------------|---------|--|--------------|---------|--|--------------|---------|--|--------------|---------|--|
|                                    |                                   | Upon         | End of  |  | Upon         | End of  |  | Upon         | End of  |  | Upon         | End of  |  |
|                                    |                                   | Entering     | 2d Year |  | Entering     | 2d Year |  | Entering     | 2d Year |  | Entering     | 2d Year |  |
| MEASUREMENTS                       |                                   |              |         |  |              |         |  |              |         |  |              |         |  |
| Age.....                           |                                   | 17.9         | 19.7    |  | 18.8         | 20.4    |  | 18.2         | 19.6    |  | 19.7         | 20.10   |  |
| Weight.....                        |                                   | 59.4         | 61.8    |  | 60.4         | 61.9    |  | 59.2         | 61.8    |  | 60.9         | 63.1    |  |
| Height                             | Standing.....                     | 171.1        | 172.6   |  | 171.2        | 172.0   |  | 170.6        | 171.5   |  | 172.2        | 174.1   |  |
|                                    | Sitting.....                      | 59.1         | 60.4    |  | 59.8         | 60.7    |  | 58.6         | 60.5    |  | 59.6         | 60.4    |  |
| Neck.....                          | Upper chest.....                  | 33.4         | 34.9    |  | 33.8         | 35.3    |  | 33.8         | 34.5    |  | 34.1         | 34.7    |  |
|                                    | Upper chest after expiration..... | 84.8         | 85.5    |  | 85.0         | 85.1    |  | 83.6         | 84.5    |  | 84.8         | 85.8    |  |
| Upper chest after inspiration..... | Upper chest.....                  | 80.8         | 81.8    |  | 81.1         | 81.3    |  | 80.7         | 80.3    |  | 81.0         | 80.7    |  |
|                                    | Upper chest after expiration..... | 88.8         | 89.7    |  | 89.7         | 90.1    |  | 87.8         | 90.2    |  | 89.4         | 90.8    |  |
| Lower chest—repose.....            | Lower chest.....                  | 75.1         | 76.9    |  | 75.0         | 76.8    |  | 74.9         | 77.0    |  | 76.1         | 77.9    |  |
|                                    | Lower chest after expiration..... | 73.0         | 74.4    |  | 72.6         | 74.1    |  | 73.0         | 74.1    |  | 73.4         | 74.8    |  |
| Lower chest after inspiration..... | Lower chest.....                  | 80.6         | 82.1    |  | 81.0         | 82.6    |  | 80.5         | 83.6    |  | 81.5         | 84.1    |  |
|                                    | Waist.....                        | 69.0         | 71.7    |  | 69.5         | 72.3    |  | 69.4         | 71.1    |  | 70.0         | 71.5    |  |
| Hips.....                          | Hips.....                         | 80.3         | 90.8    |  | 87.1         | 89.4    |  | 87.1         | 88.9    |  | 87.9         | 88.6    |  |
| Girth                              |                                   |              |         |  |              |         |  |              |         |  |              |         |  |
|                                    | Upper arm.....                    | 24.8         | 25.0    |  | 25.3         | 25.6    |  | 24.4         | 25.2    |  | 24.8         | 25.1    |  |
|                                    | Upper arm flexed.....             | 28.2         | 28.5    |  | 28.0         | 28.1    |  | 28.0         | 28.6    |  | 28.6         | 29.4    |  |
| Forearm.....                       | Forearm.....                      | 24.8         | 24.7    |  | 25.1         | 25.7    |  | 24.7         | 24.8    |  | 25.1         | 25.4    |  |
|                                    | Forearm contracted.....           | 25.5         | 25.5    |  | 25.8         | 26.4    |  | 25.4         | 25.8    |  | 25.8         | 26.1    |  |
| Thigh.....                         | Thigh.....                        | 49.0         | 51.2    |  | 50.2         | 51.4    |  | 50.2         | 50.8    |  | 50.5         | 50.1    |  |
|                                    | Calf.....                         | 33.0         | 34.6    |  | 34.5         | 34.6    |  | 33.7         | 34.2    |  | 34.1         | 34.0    |  |
| Depth                              |                                   |              |         |  |              |         |  |              |         |  |              |         |  |
|                                    | Chest.....                        | 18.7         | 19.2    |  | 18.9         | 19.4    |  | 19.1         | 19.5    |  | 19.3         | 19.7    |  |
|                                    | Abdomen.....                      | 16.7         | 17.0    |  | 17.1         | 17.8    |  | 17.5         | 18.2    |  | 17.8         | 18.2    |  |
| Neck.....                          | Neck.....                         | 10.2         | 10.3    |  | 10.3         | 10.8    |  | 10.0         | 10.3    |  | 10.1         | 10.8    |  |
|                                    | Shoulders.....                    | 40.9         | 41.4    |  | 40.8         | 41.8    |  | 40.4         | 41.1    |  | 40.7         | 41.4    |  |
| Breadth                            | Chest.....                        | 26.3         | 27.8    |  | 26.2         | 27.7    |  | 26.5         | 27.6    |  | 26.8         | 27.8    |  |
|                                    | Waist.....                        | 24.4         | 24.5    |  | 24.6         | 24.5    |  | 24.6         | 24.6    |  | 24.6         | 24.5    |  |
| Hips.....                          | Hips.....                         | 32.3         | 32.0    |  | 32.1         | 32.3    |  | 31.2         | 31.7    |  | 31.8         | 32.0    |  |
|                                    | Stretch of arms.....              | 179.0        | 180.0   |  | 177.6        | 179.7   |  | 177.7        | 179.5   |  | 179.7        | 181.8   |  |

# INTERCOLLEGIATE STRENGTH-TESTS

NOTE.—Each point in the strength test represents one kilogram (2½ pounds) lifted.

|   | Points | Points | Points | Points | Points | Points | Points | Points | Points | Points | Points | Points | Points |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. Strength of back.....                          | 134    | 187    | 147    | 147    | 214    | 147    | 209    | 162    | 215    | 108    | 215    | 215    | 215    |
| 2. Strength of legs.....                          | 201    | 303    | 220    | 242    | 341    | 242    | 347    | 265    | 374    | 205    | 374    | 374    | 374    |
| 3. Strength of right forearm.....                 | 48     | 54     | 51     | 50     | 56     | 50     | 54     | 52     | 57     | 52     | 57     | 57     | 57     |
| 4. Strength of left forearm.....                  | 43     | 49     | 47     | 45     | 51     | 45     | 49     | 48     | 51     | 48     | 51     | 51     | 51     |
| 5. Capacity of lungs.....                         | 240    | 260    | 248    | 240    | 254    | 240    | 246    | 230    | 259    | 230    | 259    | 259    | 259    |
| 6. Strength of lungs.....                         |        | 203    |        | 194    |        |        |        |        |        |        |        |        |        |
| 7. Strength of upperarms (triceps and chest)..... | 48     | 28.6   | 7      | 13     | 104    | 6      | 13     | 7      | 14     | 7      | 14     | 14     | 14     |
| 8. Strength of upperarms (biceps and back).....   | 4.7    | 28.4   | 7      | 10     | 10     | 6      | 10     | 7      | 11     | 7      | 11     | 11     | 11     |
| Total strength.....                               | 495    | 717.6  | 571.0  | 571.0  | 817.0  | 817.0  | 813.4  | 624.7  | 867.6  | 624.7  | 867.6  | 867.6  | 867.6  |

## STATISTICS OF THE USE OF THE GYMNASIUM, 1900-1901

|                  | General     |            | Floor       |            | Pool   | Hand-ball Courts | Visitors |       | Deposits in Safe |
|------------------|-------------|------------|-------------|------------|--------|------------------|----------|-------|------------------|
|                  | 5 Week-days | Satur-days | 5 Week-days | Satur-days |        |                  | Men      | Women |                  |
| October 15-31    | 6,351       | 528        | 2,293       | 110        | 4,223  | 503              | 302      | 526   | 933              |
| November . . .   | 9,256       | 631        | 4,412       | 195        | 3,613  | 842              | 229      | 531   | 1,208            |
| December . . .   | 6,420       | 717        | 2,810       | 397        | 2,188  | 660              | 318      | 500   | 632              |
| January . . . .  | 7,053       | 717        | 3,502       | 545        | 2,425  | 306              | 232      | 558   | 811              |
| February . . . . | 6,200       | 1,010      | 3,426       | 509        | 1,665  | 305              | 291      | 565   | 810              |
| March . . . . .  | 8,884       | 830        | 3,914       | 485        | 2,802  | 683              | 323      | 615   | 1,016            |
| April . . . . .  | 5,359       | 507        | 2,415       | 145        | 2,406  | 510              | 223      | 397   | 629              |
| May . . . . .    | 3,554       | 295        | 1,171       | 90         | 2,644  |                  | 194      | 366   | 366              |
|                  | 53,077      | 5,235      | 23,943      | 2,476      | 850    |                  | 2,112    | 4,058 |                  |
|                  | 5,235       |            | 2,476       |            | women  |                  | 4,058    |       |                  |
| Totals . . . . . | 58,312      |            | 26,419      |            | 22,825 | 3,809            | 6,170    |       | 6,405            |

## DAILY AVERAGE

|                    |       |       |       |      |  |      |      |    |
|--------------------|-------|-------|-------|------|--|------|------|----|
| October . . . . .  | 488   | 264   | 191   | 55   |  | 35.9 | 37.6 | 49 |
| November . . . .   | 462.8 | 210   | 220.6 | 65   |  | 35.1 | 33   | 52 |
| December . . . .   | 458.5 | 118.5 | 200.7 | 66.1 |  | 28.7 | 43   | 33 |
| January . . . . .  | 352.6 | 179   | 194.5 | 77.8 |  | 30.6 | 31.6 | 32 |
| February . . . . . | 364.7 | 144.7 | 201.5 | 72.7 |  | 29.7 | 35.6 | 33 |
| March . . . . .    | 423   | 207.5 | 186.5 | 97   |  | 27.3 | 35.9 | 39 |
| April . . . . .    | 282   | 126.7 | 127.1 | 36.2 |  | 30   | 31   | 27 |
| May . . . . .      | 161.5 | 98.3  | 53.2  | 30   |  |      | 24.3 | 14 |

## NUMBER OF PHYSICAL EXAMINATIONS

405 first examinations.

149 second examinations (required).

38 second examinations (voluntary).

189 second strength tests (voluntary).

781 total.

## NUMBER OF LOCKERS ASSIGNED

Students . . . . . 1295

Officers . . . . . 36

1331

Number credited with Athletic Attendance . . . . . 138

# COLUMBIA UNIVERSITY

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## REPORT OF THE REGISTRAR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1901

*To the President of Columbia University  
in the City of New York :*

SIR :

I have the honor to submit herewith the annual report of the Registrar of the University for the academic year ending June 30, 1901. This report consists of two main divisions : first, statistical summaries relating to the membership of the officers of the University, to the registration, geographical distribution, and previous collegiate preparation of the students enrolled under the faculties of the University Corporation, and to the degrees and diplomas conferred at the Commencement of June, 1901; second, statistical tables showing the number of students enrolled in all the courses of instruction given by our departments.

The following table (Table I) offers a comparative summary of the membership of the officers of the University for each of the last two years :

TABLE I

## SUMMARY OF OFFICERS

|  | 1899-1900 | 1900-1901 |
|--|-----------|-----------|
| Professors. ....                       | 73        | 78        |
| Adjunct and Associate Professors.....  | 14        | 15        |
| Clinical Professors and Lecturers..... | 15        | 17        |
| Instructors.....                       | 57        | 69        |
| Demonstrators.....                     | 3         | 3         |
| Assistant Demonstrators.....           | 10        | 12        |
| Tutors.....                            | 32        | 35        |
| Assistants.....                        | 51        | 48        |
| Curators.....                          | 3         | 3         |
| Lecturers.....                         | 21        | 25        |
| Clinical Assistants.....               | 71        | 74        |
| <hr/>                                  |           |           |
| Officers of Instruction.....           | 350       | 379       |
| Officers of Administration.....        | 12        | 18        |
| Emeritus Officers.....                 | 13        | 10        |
| <hr/>                                  |           |           |
| Total.....                             | 375       | 407       |

During the academic year now closing, 4440 students have been connected with the various schools of the University. Of these, 2728 have been primarily registered under the faculties within the jurisdiction of the University Corporation. The others have been enrolled in Barnard College, Teachers College, and the Summer Session of 1900. To show more clearly the nature of the entire student registration, I have prepared the following table (Table II) and explanatory notes.

The remaining statistical tables, except Table VII, refer exclusively to the University as distinct from Barnard College, Teachers College, and the Summer Session.

Table III treats of the geographical distribution of students enrolled under the faculties of the College, Law, Medicine, Applied Science, Political Science, Philosophy, and Pure Science.

TABLE II

REGISTRATION AT COLUMBIA UNIVERSITY, IN ALL FACULTIES,  
DURING THE ACADEMIC YEAR 1900-1901

| FACULTIES   | First Year | Second Year | Third Year | Fourth Year | Specials | Graduates | Total |
|---|------------|-------------|------------|-------------|----------|-----------|-------|
| Columbia College.....   | 128        | 97          | 90         | 89          | 63       | .....     | 476   |
| Barnard College.....  | 81         | 51          | 39         | 52          | 78       | .....     | 301   |
| Total undergraduates.....   | .....      | .....       | .....      | .....       | .....    | .....     | 777   |
| Faculties of Political Science, {<br>Philosophy, and Pure Science { | .....      | .....       | .....      | .....       | .....    | 433       | 433   |
| Total non-professional gradu- }<br>ate students } (*)               | .....      | .....       | .....      | .....       | .....    | 433       | 433   |
| Faculty of Applied Science .....                                    | 155        | 134         | 124        | 100         | 48       | 5         | 566   |
| Faculty of Law.....   | 173        | 148         | 100        | .....       | 2        | .....     | 423   |
| Faculty of Medicine.....  | 230        | 190         | 151        | 147         | 70       | .....     | 797   |
| Teachers College (†).....   | .....      | .....       | .....      | .....       | .....    | .....     | 528   |
| Total professional students .....                                   | .....      | .....       | .....      | .....       | .....    | .....     | 2314  |
| Deduct double registration (‡).....                                 | .....      | .....       | .....      | .....       | .....    | .....     | 105   |
| Net total resident students in {<br>the University }                | .....      | .....       | .....      | .....       | .....    | .....     | 3419  |
| Summer Session 1900.....  | .....      | .....       | .....      | .....       | .....    | .....     | 417   |
| Auditors.....   | .....      | .....       | .....      | .....       | .....    | .....     | 33    |
| Teachers College extension students (§).....                        | .....      | .....       | .....      | .....       | .....    | .....     | 679   |
| Total occasional students and auditors .....                        | .....      | .....       | .....      | .....       | .....    | .....     | 1129  |
| Deduct double registration (  ).....                                | .....      | .....       | .....      | .....       | .....    | .....     | 108   |
| Net total occasional students {<br>and auditors }                   | .....      | .....       | .....      | .....       | .....    | .....     | 1021  |
| Grand net total.....  | .....      | .....       | .....      | .....       | .....    | .....     | 4440  |

\* The total 433 does not include 111 college graduates studying under the professional faculties of Law, Medicine, and Applied Science, who are also candidates for the degree of A.M. or Ph.D.

† For a statistical classification of students primarily enrolled in Teachers College, consult the report of the Dean of Teachers College, p. 170.

‡ The 105 are distributed as follows: 8 students in Columbia College, 24 in Barnard College, and 15 in the graduate faculties are also enrolled in Teachers College as candidates for a professional diploma; 58 Teachers College students are enrolled in the graduate faculties as candidates for the higher degrees.

§ Teachers College extension students enjoy the same rights and privileges, and are subject to the same conditions, in the courses for which they enroll, as the regular students of the College.

|| This includes those Summer Session students of 1900 who returned for work at the University during the academic year 1900-1901.

TABLE III  
RESIDENCES OF STUDENTS—(A) THE UNITED STATES

| 1900-1901                        | College    | Law        | Medicine   | Applied Science | Political Science | Philosophy | Pure Science | Total       |
|----------------------------------|------------|------------|------------|-----------------|-------------------|------------|--------------|-------------|
| <b>North Atlantic Division :</b> | 441        | 313        | 686        | 497             | 86                | 303        | 47           | 2273        |
| Maine.....                       | 1          | 3          | 5          | .....           | 1                 | 1          | 1            | 12          |
| New Hampshire.....               | 1          | 1          | 1          | .....           | .....             | .....      | .....        | 4           |
| Vermont.....                     | 2          | .....      | 7          | 1               | .....             | 2          | .....        | 13          |
| Massachusetts.....               | 2          | 8          | 28         | 7               | 4                 | 7          | 1            | 57          |
| Rhode Island.....                | 1          | 1          | 14         | .....           | 2                 | .....      | .....        | 18          |
| Connecticut.....                 | 4          | 5          | 40         | 9               | .....             | 3          | .....        | 63          |
| New York *.....                  | 379        | 258        | 474        | 428             | 64                | 157        | 30           | 1799        |
| New Jersey.....                  | 47         | 23         | 107        | 46              | 8                 | 22         | 3            | 256         |
| Pennsylvania.....                | 5          | 14         | 10         | 6               | 4                 | 10         | 2            | 51          |
| <b>South Atlantic Division:</b>  | 8          | 18         | 22         | 4               | 6                 | 5          | 3            | 66          |
| Maryland.....                    | .....      | 2          | 1          | .....           | .....             | 1          | 1            | 7           |
| District of Columbia.....        | 2          | 3          | .....      | .....           | .....             | 1          | .....        | 6           |
| Virginia.....                    | 2          | 2          | 4          | .....           | .....             | .....      | 1            | 9           |
| West Virginia.....               | .....      | 1          | 2          | .....           | .....             | .....      | .....        | 3           |
| North Carolina.....              | .....      | 2          | 4          | 1               | 3                 | 1          | 1            | 12          |
| South Carolina.....              | 1          | .....      | .....      | 1               | 1                 | 2          | .....        | 5           |
| Georgia.....                     | 3          | 7          | 10         | .....           | 2                 | .....      | .....        | 22          |
| Florida.....                     | .....      | 1          | 1          | .....           | .....             | .....      | .....        | 2           |
| <b>South Central Division :</b>  | 9          | 24         | 26         | 4               | 6                 | 5          | 1            | 75          |
| Kentucky.....                    | 2          | 9          | 9          | .....           | 2                 | .....      | .....        | 22          |
| Tennessee.....                   | .....      | 8          | 2          | 1               | 1                 | 1          | 1            | 14          |
| Alabama.....                     | 1          | 2          | 7          | .....           | 1                 | .....      | .....        | 13          |
| Mississippi.....                 | 1          | 1          | .....      | .....           | .....             | .....      | .....        | 2           |
| Louisiana.....                   | .....      | 1          | .....      | 1               | .....             | 1          | .....        | 3           |
| Texas.....                       | 5          | 1          | 5          | .....           | 2                 | 2          | .....        | 15          |
| Arkansas.....                    | .....      | 1          | 3          | .....           | .....             | .....      | .....        | 4           |
| Oklahoma.....                    | .....      | 1          | .....      | .....           | .....             | 1          | .....        | 2           |
| <b>North Central Division :</b>  | 14         | 49         | 39         | 17              | 17                | 17         | 7            | 160         |
| Ohio.....                        | 5          | 11         | 13         | 5               | 5                 | 2          | .....        | 41          |
| Indiana.....                     | 2          | 8          | 5          | 1               | 1                 | 4          | .....        | 21          |
| Illinois.....                    | 3          | 11         | 4          | 3               | 4                 | 4          | .....        | 29          |
| Michigan.....                    | 1          | 1          | 3          | .....           | 1                 | 3          | 2            | 11          |
| Wisconsin.....                   | .....      | .....      | 4          | .....           | 1                 | .....      | .....        | 5           |
| Minnesota.....                   | .....      | .....      | 2          | 2               | .....             | 3          | 1            | 8           |
| Iowa.....                        | .....      | 5          | 3          | .....           | 4                 | .....      | 1            | 13          |
| Missouri.....                    | 3          | 7          | 2          | 3               | .....             | .....      | 2            | 17          |
| North Dakota.....                | .....      | 2          | .....      | .....           | .....             | .....      | .....        | 2           |
| Nebraska.....                    | .....      | 3          | 3          | 2               | 1                 | 1          | .....        | 10          |
| Kansas.....                      | .....      | 1          | .....      | 1               | .....             | .....      | 1            | 3           |
| <b>Western Division :</b>        | 3          | 17         | 7          | 33              | 4                 | 8          | 4            | 76          |
| Montana.....                     | 1          | 2          | 2          | .....           | .....             | .....      | .....        | 5           |
| Wyoming.....                     | .....      | 1          | .....      | .....           | .....             | .....      | .....        | 1           |
| Colorado.....                    | 1          | 3          | 1          | 13              | .....             | 1          | 2            | 21          |
| New Mexico.....                  | .....      | .....      | 3          | .....           | .....             | .....      | .....        | 3           |
| Arizona.....                     | .....      | .....      | 1          | 1               | .....             | .....      | .....        | 2           |
| Utah.....                        | 1          | .....      | 6          | .....           | 1                 | 1          | .....        | 9           |
| Nevada.....                      | .....      | 1          | .....      | .....           | .....             | .....      | .....        | 2           |
| Washington.....                  | .....      | 1          | 2          | 1               | .....             | .....      | .....        | 4           |
| Oregon.....                      | .....      | 3          | 1          | .....           | .....             | 1          | .....        | 5           |
| California.....                  | .....      | 7          | 2          | 5               | 3                 | 5          | 1            | 23          |
| <b>Insular Territories :</b>     | .....      | 2          | 2          | .....           | .....             | .....      | .....        | 4           |
| Hawaiian Islands.....            | .....      | 1          | 1          | .....           | .....             | .....      | .....        | 2           |
| Porto Rico.....                  | .....      | 1          | 1          | .....           | .....             | .....      | .....        | 2           |
| <b>Total.....</b>                | <b>475</b> | <b>423</b> | <b>782</b> | <b>555</b>      | <b>119</b>        | <b>238</b> | <b>62</b>    | <b>2654</b> |

\* 1488 students claim New York City for their permanent residence, distributed among the faculties as follows : College, 314 ; Law, 206 ; Medicine, 375 ; Applied Science, 373 ; Graduate Faculties of Political Science, Philosophy, and Pure Science, 220.



TABLE III (*continued*)

## (B)—FOREIGN COUNTRIES

| 1900-1901               | College    | Law        | Medicine   | Applied Science | Political Science | Philosophy | Pure Science | Total       |
|-------------------------|------------|------------|------------|-----------------|-------------------|------------|--------------|-------------|
| Australia.....          |            |            |            | 1               |                   |            |              | 1           |
| Canada.....             |            |            | 3          |                 | 2                 | 1          |              | 6           |
| Central America.....    |            |            |            | 1               |                   |            |              | 1           |
| Cuba.....               |            |            | 5          | 2               |                   |            |              | 7           |
| England.....            | 1          |            | 2          | 1               |                   | 2          |              | 6           |
| Japan.....              |            |            |            |                 | 3                 | 3          |              | 6           |
| Mexico.....             |            |            | 2          | 2               | 2                 |            |              | 6           |
| Persia.....             |            |            | 1          |                 |                   |            |              | 1           |
| South Africa.....       |            |            |            | 2               |                   |            |              | 2           |
| South America.....      |            |            | 1          | 1               |                   |            |              | 2           |
| Sweden.....             |            |            |            |                 |                   |            | 1            | 1           |
| Syria.....              |            |            | 1          |                 |                   |            |              | 1           |
| Turkey.....             |            |            |            | 1               |                   |            |              | 1           |
| <b>Total.....</b>       | <b>1</b>   |            | <b>15</b>  | <b>11</b>       | <b>7</b>          | <b>6</b>   | <b>1</b>     | <b>41</b>   |
| <i>Auditors.....</i>    |            |            |            |                 |                   |            |              | <b>33</b>   |
| <b>Grand Total.....</b> | <b>476</b> | <b>423</b> | <b>797</b> | <b>556</b>      | <b>126</b>        | <b>244</b> | <b>63</b>    | <b>2726</b> |

In order to indicate the annual enrollment in the University faculties since 1890, and at the same time to suggest the extent of the gradually increasing radius of the University's sphere of influence in drawing upon an ever widening constituency, I have had prepared Table IV.

TABLE IV

COMPARATIVE TABLE SHOWING THE GEOGRAPHICAL DISTRIBUTION OF STUDENTS SINCE 1890

(A)—THE UNITED STATES

|  | 1890  | 1891  | 1892  | 1893  | 1894  | 1895  | 1896  | 1897  | 1898  | 1899  | 1900  | 1901  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>North Atlantic Division:</b>                | 1580  | 1576  | 1400  | 1435  | 1585  | 1712  | 1834  | 1866  | 1848  | 1894  | 2069  | 2273  |
| Maine.....                                     | 4     | 4     | 6     | 6     | 10    | 8     | 14    | 14    | 10    | 9     | 9     | 12    |
| New Hampshire.....                             | 8     | 8     | 6     | 5     | 6     | 6     | 4     | 4     | 3     | 4     | 4     | 4     |
| Vermont.....                                   | 8     | 5     | 5     | 7     | 8     | 9     | 6     | 9     | 13    | 6     | 10    | 13    |
| Massachusetts.....                             | 27    | 27    | 30    | 35    | 37    | 42    | 34    | 36    | 41    | 37    | 62    | 57    |
| Rhode Island.....                              | 17    | 15    | 12    | 8     | 9     | 12    | 10    | 8     | 10    | 11    | 11    | 18    |
| Connecticut.....                               | 55    | 51    | 35    | 33    | 30    | 40    | 35    | 40    | 54    | 58    | 70    | 63    |
| New York.....                                  | 1217  | 1220  | 1112  | 1137  | 1246  | 1335  | 1286  | 1308  | 1433  | 1501  | 1630  | 1790  |
| New Jersey.....                                | 200   | 180   | 165   | 176   | 212   | 220   | 210   | 214   | 237   | 230   | 230   | 256   |
| Pennsylvania.....                              | 24    | 38    | 20    | 26    | 27    | 31    | 35    | 33    | 47    | 38    | 43    | 51    |
| <b>South Atlantic Division:</b>                | 38    | 29    | 32    | 38    | 31    | 31    | 30    | 41    | 47    | 45    | 69    | 66    |
| Delaware.....                                  | 2     | 2     | 1     | 1     | 1     | 2     | ..... | ..... | 2     | ..... | 2     | ..... |
| Maryland.....                                  | 5     | 4     | 5     | 8     | 8     | 9     | 5     | 6     | 4     | 5     | 7     | 7     |
| District of Columbia.....                      | 6     | 3     | 6     | 5     | 3     | 3     | 3     | 1     | 2     | 3     | 5     | 6     |
| Virginia.....                                  | 10    | 6     | 4     | 7     | 5     | 4     | 5     | 5     | 10    | 10    | 14    | 9     |
| West Virginia.....                             | 2     | 1     | 3     | 3     | 5     | 2     | 1     | 5     | 4     | 2     | 2     | 3     |
| North Carolina.....                            | 6     | 5     | 6     | 5     | 2     | 1     | 2     | 9     | 8     | 8     | 15    | 12    |
| South Carolina.....                            | 2     | 1     | ..... | 2     | 3     | 2     | 2     | 2     | 2     | 2     | 1     | 2     |
| Georgia.....                                   | 5     | 7     | 7     | 5     | 3     | 7     | 10    | 12    | 14    | 11    | 20    | 22    |
| Florida.....                                   | ..... | ..... | ..... | 3     | 1     | 1     | 2     | 1     | 3     | 2     | 3     | 2     |
| <b>South Central Division:</b>                 | 27    | 24    | 21    | 30    | 42    | 41    | 34    | 35    | 47    | 42    | 48    | 75    |
| Kentucky.....                                  | 3     | 4     | 5     | 9     | 11    | 14    | 10    | 8     | 10    | 11    | 13    | 22    |
| Tennessee.....                                 | 3     | 4     | 7     | 6     | 6     | 5     | 8     | 7     | 9     | 6     | 5     | 14    |
| Alabama.....                                   | 3     | 3     | 3     | 4     | 7     | 8     | 6     | 7     | 10    | 8     | 8     | 13    |
| Mississippi.....                               | 3     | 2     | 1     | ..... | ..... | ..... | ..... | 1     | 2     | 2     | 3     | 2     |
| Louisiana.....                                 | 3     | 2     | 1     | 3     | 1     | 1     | 1     | 2     | 2     | 1     | 2     | 3     |
| Texas.....                                     | 9     | 6     | 4     | 8     | 16    | 12    | 9     | 5     | 11    | 9     | 14    | 15    |
| Arkansas.....                                  | 3     | 3     | ..... | ..... | 1     | 1     | ..... | 4     | 2     | 5     | 3     | 4     |
| Oklahoma.....                                  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1     | 1     | ..... | ..... | 2     |
| <b>North Central Division:</b>                 | 73    | 73    | 65    | 81    | 97    | 102   | 113   | 115   | 130   | 133   | 159   | 160   |
| Ohio.....                                      | 19    | 20    | 19    | 25    | 28    | 26    | 35    | 37    | 37    | 25    | 34    | 41    |
| Indiana.....                                   | 1     | 1     | 4     | 4     | 8     | 12    | 5     | 10    | 11    | 17    | 24    | 21    |
| Illinois.....                                  | 17    | 15    | 10    | 6     | 16    | 9     | 9     | 12    | 19    | 24    | 23    | 29    |
| Michigan.....                                  | 1     | 3     | 3     | 4     | 7     | 2     | 3     | 7     | 7     | 10    | 16    | 11    |
| Wisconsin.....                                 | 9     | 12    | 10    | 13    | 10    | 8     | 13    | 8     | 13    | 11    | 9     | 5     |
| Minnesota.....                                 | 6     | 5     | 6     | 8     | 8     | 12    | 11    | 6     | 7     | 8     | 8     | 8     |
| Iowa.....                                      | 5     | 3     | 5     | 7     | 4     | 6     | 8     | 12    | 13    | 11    | 8     | 13    |
| Missouri.....                                  | 9     | 9     | 4     | 5     | 6     | 14    | 17    | 9     | 12    | 11    | 14    | 17    |
| North Dakota.....                              | 1     | ..... | ..... | 1     | 2     | 2     | 3     | ..... | 1     | 2     | 2     | 2     |
| South Dakota.....                              | 1     | ..... | ..... | 1     | ..... | 1     | ..... | ..... | ..... | 1     | 1     | ..... |
| Nebraska.....                                  | 1     | 3     | 2     | 3     | 4     | 5     | 4     | 6     | 2     | 7     | 12    | 10    |
| Kansas.....                                    | 4     | 1     | 1     | 4     | 4     | 4     | 4     | 7     | 7     | 6     | 8     | 3     |
| Indian Territory.....                          | ..... | 1     | 1     | 1     | ..... | 1     | 1     | 1     | 1     | ..... | ..... | ..... |
| <b>Western Division:</b>                       | 21    | 25    | 24    | 29    | 27    | 25    | 27    | 38    | 45    | 55    | 59    | 76    |
| Montana.....                                   | 4     | 6     | ..... | 3     | 1     | 2     | 3     | 4     | 4     | 8     | 7     | 8     |
| Wyoming.....                                   | ..... | 1     | ..... | ..... | ..... | ..... | 1     | ..... | 1     | 2     | 1     | 1     |
| Colorado.....                                  | 3     | 7     | 5     | 3     | 1     | 1     | 2     | 6     | 12    | 12    | 13    | 21    |
| New Mexico.....                                | ..... | ..... | 1     | 1     | 1     | ..... | ..... | 1     | 1     | 1     | 1     | 3     |
| Arizona.....                                   | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1     |
| Utah.....                                      | 2     | 1     | 2     | 3     | 3     | 5     | 2     | 4     | 5     | 6     | 5     | 9     |
| Nevada.....                                    | 1     | 1     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 3     | 3     | 1     |
| Idaho.....                                     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | ..... | ..... | ..... | ..... | ..... |
| Washington.....                                | 3     | 4     | 2     | ..... | 1     | 1     | 4     | 4     | 4     | 1     | 2     | 4     |
| Oregon.....                                    | 2     | 3     | 5     | 6     | 8     | 3     | 1     | 5     | 3     | 3     | 3     | 5     |
| California.....                                | 5     | 3     | 7     | 12    | 11    | 13    | 13    | 14    | 15    | 19    | 24    | 23    |
| <b>Insular and Non-contiguous Territories:</b> | ..... | ..... | ..... | 1     | 1     | ..... | 1     | ..... | ..... | 1     | 3     | 4     |
| Alaska.....                                    | ..... | ..... | ..... | 1     | 1     | ..... | 1     | ..... | ..... | 1     | ..... | ..... |
| Hawaiian Islands.....                          | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 3     | 2     |
| Porto Rico.....                                | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2     |
| <b>Total.....</b>                              | 1719  | 1729  | 1542  | 1614  | 1763  | 1911  | 1839  | 1895  | 2117  | 2170  | 2407  | 2634  |

TABLE IV (continued)  
(B)—FOREIGN COUNTRIES

|                          | 1890        | 1891        | 1892        | 1893        | 1894        | 1895        | 1896        | 1897        | 1898        | 1899        | 1900        | 1901         |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <b>North America :</b>   |             |             |             |             |             |             |             |             |             |             |             |              |
| Bermuda .....            | 24          | 10          | 13          | 15          | 18          | 22          | 21          | 14          | 18          | 15          | 18          | 20           |
| Canada .....             | 11          | 1           | 6           | 7           | 10          | 11          | 12          | 7           | 11          | 10          | 9           | 6            |
| Central America .....    | 8           | 1           | 3           |             |             | 1           | 2           | 3           |             |             |             | 1            |
| Costa Rica .....         |             | 4           |             | 2           | 2           | 1           | 1           |             |             |             |             | 7            |
| Cuba .....               | 2           | 2           | 1           | 2           | 4           | 4           | 4           | 4           | 5           | 4           | 5           | 7            |
| Mexico .....             | 1           | 1           | 1           | 2           | 1           | 1           | 1           | 2           | 2           | 1           | 4           | 6            |
| Porto Rico .....         | 1           |             |             | 1           |             | 2           |             |             |             |             |             |              |
| Santo Domingo .....      |             |             |             |             |             | 1           |             |             |             |             |             |              |
| West Indies .....        |             |             | 1           |             |             |             |             | 1           |             |             |             |              |
| <b>South America :</b>   |             |             |             |             |             |             |             |             |             |             |             |              |
| Brazil .....             | 2           | 2           | 4           | 4           | 2           | 3           | 1           |             |             |             | 1           | 2            |
| Peru .....               |             | 1           | 1           | 1           |             |             |             |             |             |             |             |              |
| U. S. of Colombia .....  | 2           | 1           | 2           | 3           | 1           | 3           | 1           |             |             |             |             |              |
| Unclassified .....       |             |             |             |             | 1           |             |             |             |             |             | 1           | 2            |
| <b>Europe :</b>          |             |             |             |             |             |             |             |             |             |             |             |              |
| Austro-Hungary .....     | 5           | 5           | 9           | 5           | 1           | 2           | 2           | 5           | 13          | 7           | 7           | 8            |
| England .....            |             | 1           | 3           | 2           |             |             |             |             | 3           |             |             | 6            |
| France .....             |             |             | 1           | 1           | 1           |             | 1           |             |             |             |             |              |
| Germany .....            | 1           | 2           | 1           |             |             |             |             |             |             |             |             |              |
| Ireland .....            |             |             |             |             |             |             |             | 1           | 1           | 1           | 1           |              |
| Italy .....              |             |             | 1           |             |             |             | 1           |             |             |             |             |              |
| Russia .....             | 1           |             | 2           |             |             | 1           |             | 1           | 5           | 3           |             |              |
| Scotland .....           |             |             |             | 1           |             |             |             |             | 1           |             |             |              |
| Spain .....              |             | 1           | 1           |             |             | 1           |             | 1           | 1           | 1           |             |              |
| Sweden .....             |             |             |             | 1           |             |             |             |             |             |             |             | 1            |
| Switzerland .....        |             |             |             |             |             |             |             |             | 1           |             |             |              |
| Turkey .....             | 1           | 1           |             |             |             |             |             | 2           | 1           | 2           | 1           | 1            |
| <b>Asia :</b>            |             |             |             |             |             |             |             |             |             |             |             |              |
| Asia Minor .....         | 3           | 5           | 3           | 3           | 1           | 4           | 7           | 3           | 5           | 10          | 16          | 8            |
| China .....              |             | 1           | 1           |             |             | 1           |             |             | 1           |             |             |              |
| India .....              |             |             | 1           |             |             |             |             |             |             |             |             |              |
| Japan .....              | 3           | 3           |             | 2           | 1           | 3           | 7           |             | 3           | 9           | 14          | 6            |
| Persia .....             |             |             |             |             |             |             |             | 3           | 1           | 1           | 1           | 1            |
| Syria .....              |             |             | 1           | 1           |             |             |             |             |             |             | 1           | 1            |
| <b>Africa :</b>          |             |             |             | 2           |             |             |             | 1           | 1           | 3           | 2           | 2            |
| Egypt .....              |             |             |             | 1           |             |             |             |             |             |             |             |              |
| Liberia .....            |             |             | 1           |             |             |             |             |             |             |             |             |              |
| South Africa .....       |             |             |             |             |             |             |             | 1           | 1           | 3           | 2           | 2            |
| <b>Australia :</b>       |             |             |             |             |             |             |             |             |             |             | 1           | 1            |
| <b>Oceania :</b>         |             |             |             |             |             | 1           | 1           | 3           | 3           | 3           |             |              |
| Hawaiian Is. ....        |             |             |             |             |             | 1           | 1           | 3           | 3           | 3           |             |              |
| <b>Total .....</b>       | <b>34</b>   | <b>22</b>   | <b>31</b>   | <b>27</b>   | <b>22</b>   | <b>32</b>   | <b>32</b>   | <b>26</b>   | <b>40</b>   | <b>38</b>   | <b>45</b>   | <b>41</b>    |
| <b>Grand Total .....</b> | <b>1753</b> | <b>1751</b> | <b>1573</b> | <b>1641</b> | <b>1805</b> | <b>1943</b> | <b>1871</b> | <b>1921</b> | <b>2157</b> | <b>2208</b> | <b>2452</b> | <b>*2695</b> |

192 higher institutions of learning in the United States, and 25 similar institutions in foreign countries, are represented by graduates studying under our various faculties. A total of 1087 students hold degrees of various kinds, representing 40.3 per cent. of our total enrollment. Table V indicates in detail the distribution of the graduates of these 217 higher institutions.

\* Exclusive of 33 auditors.

TABLE V  
 PARENTAGE OF DEGREES  
 (A)—HIGHER INSTITUTIONS IN THE UNITED STATES

| College                                 | Law | Medicine | Applied Sciences | Political Science | Philosophy | Pure Science | Total. |
|---|-----|----------|------------------|-------------------|------------|--------------|--------|
| Adelphi College.....                    |     |          | 1                | 1                 | 3          |              | 5      |
| Adrian College.....                     |     |          |                  |                   | 1          |              | 1      |
| Alabama A. and M. Coll.....             |     | 1        |                  |                   |            |              | 1      |
| Alabama Polytech. Inst.....             |     |          | 2                | 2                 |            |              | 4      |
| Albany Medical Coll.....                |     | 1        |                  |                   |            |              | 1      |
| Albion College, Mich.....               |     |          |                  |                   | 1          | 1            | 2      |
| Alfred University, N. Y.....            |     | 1        |                  | 1                 | 1          |              | 3      |
| Allegheny College, Pa.....              |     |          | 1                | 1                 |            |              | 2      |
| Amherst College.....                    | 6   | 7        | 3                | 5                 | 2          |              | 23     |
| Armour Inst. of Tech.....               |     |          | 1                |                   |            |              | 1      |
| Austin College.....                     | 1   |          |                  |                   |            |              | 1      |
| Baldwin University.....                 | 1   |          |                  |                   |            |              | 1      |
| Bellevue Hospital Med. Coll., N. Y..... |     | 1        |                  |                   |            |              | 1      |
| Beloit College.....                     |     |          |                  | 2                 |            |              | 2      |
| Bethel College.....                     | 2   |          |                  |                   |            |              | 2      |
| Black Hills College.....                | 1   |          |                  |                   |            |              | 1      |
| Boston University.....                  | 2   | 3        |                  | 5                 | 2          |              | 12     |
| Bowdoin College.....                    | 1   |          |                  |                   |            |              | 1      |
| Brooklyn Polytech. Inst.....            |     |          | 2                | 1                 | 2          |              | 5      |
| Brown University.....                   | 1   | 11       |                  | 6                 | 6          | 1            | 25     |
| Bryn Mawr College.....                  |     |          |                  | 3                 |            | 3            | 6      |
| Buchtel College.....                    |     |          |                  |                   | 1          |              | 1      |
| Bucknell University.....                | 1   |          |                  |                   |            | 1            | 2      |
| Canisius College, N. Y.....             | 3   | 1        |                  |                   |            |              | 4      |
| Carleton College.....                   | 1   | 1        |                  |                   | 1          |              | 3      |
| Case School Appl. Science.....          |     |          | 1                |                   |            |              | 1      |
| Central Pennsylvania Coll.....          |     |          |                  |                   | 1          |              | 1      |
| Central University, Ky.....             | 1   |          |                  |                   |            |              | 1      |
| Centre College, Ky.....                 |     |          |                  | 1                 |            |              | 1      |
| Cincinnati Coll. of Pharmacy.....       |     | 1        |                  |                   |            |              | 1      |
| Colby University, Me.....               | 1   | 1        |                  | 2                 | 3          | 1            | 8      |
| Colgate University, N. Y.....           |     | 2        |                  | 1                 |            |              | 3      |
| Coll. of the City of New York.....      | 34  | 40       | 14               | 3                 | 32         | 4            | 127    |
| College of Pharmacy, N. Y.....          |     | 8        | 1                |                   |            |              | 9      |
| Colorado College.....                   |     |          | 2                |                   |            |              | 2      |
| Colorado State Sch. of Mines.....       |     | 2        |                  |                   |            | 1            | 3      |
| Columbia University.....                | 41  | 27       | 14               | 18                | 65         | 25           | 190    |
| Concordia College, Ind.....             |     |          |                  | 1                 |            |              | 1      |
| Cooper Union, N. Y.....                 |     |          | 1                |                   | 1          |              | 2      |
| Cornell College, Ia.....                |     |          |                  | 1                 |            |              | 1      |
| Cornell University, N. Y.....           | 3   | 4        | 1                | 3                 | 7          | 2            | 20     |
| Creighton College, Neb.....             |     |          | 1                |                   |            |              | 1      |
| Crozier Theol. Sem.....                 | 1   |          |                  |                   |            |              | 1      |
| Cumberland Presb. Theol. Sem.....       |     |          |                  | 1                 |            |              | 1      |
| Cumberland University, Tenn.....        |     |          |                  | 1                 |            |              | 1      |
| Dartmouth College.....                  | 1   | 1        |                  |                   | 3          |              | 5      |
| De Pauw University.....                 |     | 1        |                  |                   |            |              | 1      |
| Detroit College.....                    |     | 1        |                  |                   |            |              | 1      |
| Dickinson College, Pa.....              | 1   | 1        |                  |                   | 1          |              | 3      |
| Drew Theol. Sem., N. J.....             |     |          |                  |                   | 2          |              | 2      |
| Earlham College, Ind.....               |     | 1        |                  | 1                 | 1          |              | 3      |
| Elmira College, N. Y.....               |     |          |                  |                   | 1          |              | 1      |
| Emory College, Va.....                  |     | 1        |                  | 2                 |            |              | 3      |
| Eureka College, Ill.....                | 1   |          |                  |                   | 1          |              | 2      |
| Franklin College.....                   |     | 1        |                  |                   |            |              | 1      |
| Franklin and Marshall Coll.....         |     |          |                  | 1                 |            |              | 1      |
| Furman University.....                  |     |          |                  | 1                 |            |              | 1      |
| Geneva College, Pa.....                 |     |          |                  |                   | 1          |              | 1      |
| Georgetown University.....              | 1   | 2        |                  |                   |            |              | 3      |
| Grove City College, Pa.....             |     | 1        |                  |                   |            |              | 1      |
| Guilford College, N. C.....             | 1   |          |                  |                   |            |              | 1      |
| Hamilton College, N. Y.....             | 2   | 1        |                  |                   |            |              | 3      |
| Hamline College.....                    |     |          |                  |                   | 1          |              | 1      |

TABLE V (continued)

| College                                 | Law | Medicine | Applied Science | Political Science | Philosophy | Pure Science | Total |
|---|-----|----------|-----------------|-------------------|------------|--------------|-------|
| Harvard University.....                 | 17  | 17       | 2               | 2                 | 18         | 1            | 57    |
| Haverford College, Pa.....              | 2   |          |                 |                   |            |              | 2     |
| Hebrew Union College.....               |     |          |                 |                   | 1          |              | 1     |
| Hiram College, O.....                   |     |          |                 | 3                 |            |              | 3     |
| Hobart College, N. Y.....               | 1   | 1        |                 |                   |            |              | 2     |
| Holy Cross College, Mass.....           | 1   | 5        |                 |                   |            |              | 6     |
| Howard College, Ala.....                | 1   | 1        |                 |                   |            |              | 1     |
| Illinois Wesleyan University.....       | 1   |          |                 |                   |            |              | 1     |
| Indiana University.....                 |     | 1        |                 | 2                 | 2          |              | 5     |
| Johns Hopkins University.....           | 1   |          | 2               |                   |            |              | 3     |
| Kentucky Sch. of Medicine.....          |     | 1        |                 |                   |            |              | 1     |
| Kentucky University.....                | 1   | 4        |                 |                   |            |              | 5     |
| Kenyon College, O.....                  | 2   | 4        |                 |                   |            |              | 2     |
| King College, Tenn.....                 | 1   |          |                 |                   |            |              | 1     |
| Knox College, Ill.....                  | 2   |          |                 | 1                 | 2          |              | 5     |
| Lafayette College, Pa.....              | 2   | 1        |                 | 1                 | 2          |              | 6     |
| Lehigh University, Pa.....              |     |          | 1               |                   |            |              | 1     |
| Leland Stanford, jr., Univ.....         | 5   | 3        |                 | 1                 | 4          | 4            | 17    |
| Manhattan College, N. Y.....            |     | 3        |                 |                   |            |              | 3     |
| Marietta College, O.....                | 2   |          |                 | 1                 |            |              | 3     |
| Maryland Agricultural Coll.....         |     | 1        |                 |                   |            |              | 1     |
| Mass. Inst. of Tech.....                |     |          |                 |                   |            | 2            | 2     |
| Memphis Hospital Med. Coll.....         |     | 1        |                 |                   |            |              | 1     |
| Mercer University.....                  | 1   |          |                 |                   |            |              | 1     |
| Middlebury College, Vt.....             | 1   |          |                 |                   |            |              | 1     |
| Miss. Agr. and Mech. Coll.....          |     |          |                 | 1                 | 1          |              | 2     |
| Mount Holyoke Coll., Mass.....          |     |          |                 |                   | 1          |              | 1     |
| Mount Union Coll., O.....               |     |          |                 | 2                 |            |              | 2     |
| New Hampshire State Coll.....           |     | 1        |                 |                   |            |              | 1     |
| N. Y. Homeopathic Med. Coll.....        |     | 1        |                 |                   |            |              | 1     |
| New York Law School.....                | 1   | 1        |                 | 3                 | 1          |              | 5     |
| New York University.....                |     | 9        |                 | 5                 | 12         | 1            | 27    |
| Northwestern University, Ill.....       | 1   | 1        |                 |                   |            |              | 2     |
| Notre Dame University, Ind.....         | 1   | 2        |                 |                   |            |              | 3     |
| Oberlin College, O.....                 | 4   |          |                 | 1                 |            |              | 5     |
| Ohio State University.....              | 1   | 1        |                 |                   | 3          |              | 5     |
| Ohio Wesleyan University.....           |     | 1        |                 | 2                 |            |              | 3     |
| Ottawa University, Kans.....            | 1   |          |                 |                   |            |              | 1     |
| Pacific University, Ore.....            |     |          |                 |                   |            | 1            | 1     |
| Pennsylvania Coll. for Women.....       |     |          |                 |                   | 1          |              | 1     |
| Pennsylvania Military College.....      | 1   |          | 2               |                   |            | 1            | 4     |
| Pennsylvania State Coll. (A. & M.)..... | 2   | 1        |                 |                   |            |              | 4     |
| Porto Rico Institute, Civil.....        | 1   | 2        |                 |                   |            |              | 3     |
| Princeton University.....               | 5   | 18       | 1               | 2                 | 4          |              | 30    |
| Radcliffe College, Mass.....            |     |          |                 | 2                 | 2          | 1            | 5     |
| Richmond College, Va.....               | 1   |          |                 |                   |            |              | 1     |
| Roanoke College, Va.....                |     | 2        |                 |                   |            |              | 2     |
| Rutgers College, N. J.....              | 2   | 6        |                 | 2                 | 1          | 1            | 12    |
| St. Francis College, N. Y.....          | 3   | 1        | 4               | 1                 | 4          |              | 13    |
| St. Francis Xavier College, N. Y.....   |     | 6        |                 |                   |            |              | 6     |
| St. John's College, Brooklyn.....       |     | 1        |                 |                   |            |              | 1     |
| St. John's College, Md.....             | 1   |          |                 |                   |            |              | 1     |
| St. John's College, Mhtn, N. Y.....     |     | 1        | 1               |                   |            |              | 2     |
| St. Joseph's College.....               |     | 1        |                 |                   |            |              | 1     |
| St. Lawrence University, N. Y.....      |     |          |                 |                   | 3          |              | 3     |
| St. Mary's University, Texas.....       | 1   |          |                 |                   |            |              | 1     |
| St. Peter's College.....                |     | 3        |                 |                   |            |              | 3     |
| St. Stephen's College, N. Y.....        |     |          |                 |                   | 2          |              | 2     |
| Santa Clara College, Cal.....           | 2   |          |                 |                   |            |              | 2     |
| Scio College, O.....                    |     |          |                 |                   | 1          |              | 1     |
| Seton Hall College, N. J.....           | 1   | 2        |                 |                   |            |              | 3     |
| Simpson College, Ia.....                |     |          |                 |                   |            | 2            | 2     |
| Smith College, Mass.....                |     |          |                 | 1                 | 0          | 2            | 12    |
| Southwestern University, Tex.....       |     | 2        |                 |                   |            |              | 2     |
| Stevens Institute, N. J.....            |     |          | 2               |                   |            |              | 1     |
| Storrs Agricultural Coll., Conn.....    |     | 1        |                 |                   |            |              | 1     |
| Swarthmore College, Pa.....             |     | 2        |                 |                   | 3          |              | 5     |

TABLE V (continued)

|   | College | Law | Medicine | Applied<br>Science | Political<br>Science | Philosophy | Pure Science | Total |
|---|---------|-----|----------|--------------------|----------------------|------------|--------------|-------|
| Syracuse University, N. Y.....                |         |     |          |                    | 1                    | 5          |              | 6     |
| Trinity College, Conn.....                    |         | 1   | 3        |                    |                      | 3          |              | 7     |
| Trinity College, N. C.....                    |         |     | 2        |                    |                      | 3          |              | 4     |
| Trinity University, Tex.....                  |         |     |          |                    | 2                    |            |              | 2     |
| Tufts College, Mass.....                      |         | 1   |          |                    |                      |            |              | 1     |
| Tulane University, La.....                    |         |     |          | 1                  |                      |            | 1            | 2     |
| Union Theol. Sem., N. Y.....                  |         |     |          |                    | 4                    | 2          |              | 6     |
| Union University, N. Y.....                   |         | 1   |          |                    | 4                    | 1          |              | 6     |
| University of Alabama.....                    |         |     | 2        |                    |                      |            |              | 2     |
| University of Buffalo.....                    |         | 1   |          | 1                  |                      |            |              | 2     |
| University of California.....                 |         | 2   | 2        |                    | 2                    | 1          | 2            | 9     |
| University of Chicago.....                    |         | 1   |          |                    | 2                    | 1          |              | 4     |
| University of Cincinnati.....                 |         |     |          |                    |                      | 1          |              | 1     |
| University of Colorado.....                   |         | 1   |          | 1                  |                      |            | 2            | 4     |
| University of Georgia.....                    |         | 5   | 1        |                    | 2                    |            | 1            | 9     |
| University of Illinois.....                   |         |     |          |                    |                      | 1          |              | 1     |
| University of Indiana.....                    |         | 1   |          |                    |                      |            |              | 1     |
| University of Iowa.....                       |         | 1   | 1        |                    | 1                    | 1          |              | 4     |
| University of Kansas.....                     |         |     |          |                    |                      |            | 3            | 3     |
| University of Louisville.....                 |         | 1   |          |                    |                      |            |              | 1     |
| University of Maine.....                      |         |     |          | 1                  |                      |            | 1            | 2     |
| University of Michigan.....                   |         | 2   |          |                    | 3                    | 5          |              | 10    |
| University of Minnesota.....                  |         |     |          |                    |                      | 1          | 1            | 2     |
| University of Missouri.....                   |         | 1   |          |                    |                      |            |              | 1     |
| University of Nebraska.....                   |         | 2   | 2        |                    | 2                    | 2          |              | 8     |
| University of Nevada.....                     |         |     | 1        |                    |                      |            |              | 1     |
| University of North Carolina.....             |         |     | 1        |                    | 2                    |            |              | 3     |
| University of Oklahoma.....                   |         | 1   |          |                    |                      |            |              | 1     |
| University of Oregon.....                     |         | 2   |          |                    |                      |            |              | 2     |
| University of Pennsylvania.....               |         | 1   | 1        | 1                  |                      |            |              | 3     |
| University of Rochester.....                  |         | 4   |          |                    |                      |            |              | 4     |
| University of Tennessee.....                  |         |     | 1        |                    | 1                    |            | 1            | 3     |
| University of Texas.....                      |         |     |          |                    | 2                    |            |              | 2     |
| University of the South, Tenn.....            |         | 2   |          |                    | 1                    |            |              | 3     |
| University of Utah.....                       |         |     |          | 2                  |                      | 1          | 1            | 4     |
| University of Vermont.....                    |         |     | 1        |                    |                      |            | 1            | 2     |
| University of Virginia.....                   |         | 1   | 4        |                    |                      |            |              | 5     |
| University of Wisconsin.....                  |         |     | 1        |                    | 1                    |            |              | 2     |
| Upper Iowa University.....                    |         |     | 1        |                    | 2                    |            |              | 3     |
| Vanderbilt University, Tenn.....              |         | 2   |          |                    |                      | 1          |              | 3     |
| Vassar College, N. Y.....                     |         |     |          |                    | 4                    | 11         |              | 15    |
| Villanova College, Pa.....                    |         | 1   |          |                    |                      |            |              | 1     |
| Wabash College, Ind.....                      |         | 2   | 1        |                    | 2                    | 2          |              | 7     |
| Wake Forest College, N. C.....                |         |     |          |                    |                      | 2          | 1            | 3     |
| Washington and Jefferson Coll., Pa.....       |         | 1   |          |                    |                      | 2          |              | 3     |
| Washington and Lee Univ., Va.....             |         | 1   | 1        |                    |                      |            |              | 2     |
| Wellesley College, Mass.....                  |         |     |          |                    | 4                    | 15         | 4            | 23    |
| Wells College, N. Y.....                      |         |     |          |                    |                      | 1          | 1            | 2     |
| Wesleyan University, Conn.....                |         |     | 3        | 1                  | 3                    | 4          |              | 11    |
| Western Maryland College.....                 |         |     |          |                    |                      | 1          |              | 1     |
| Western Reserve University, O.....            |         | 1   |          |                    | 1                    |            |              | 2     |
| Westminster College.....                      |         |     |          |                    | 2                    |            |              | 2     |
| Whitman College.....                          |         |     |          |                    | 1                    |            |              | 1     |
| William Jewell Coll., Mo.....                 |         |     |          |                    |                      |            | 1            | 1     |
| Williams College, Mass.....                   |         | 13  | 11       | 2                  | 4                    | 1          | 4            | 35    |
| Wittenberg College, O.....                    |         |     |          |                    | 1                    |            |              | 1     |
| Wofford College, S. C.....                    |         |     |          |                    |                      | 2          |              | 2     |
| Woman's College, Baltimore.....               |         |     |          |                    |                      | 1          | 1            | 2     |
| Woman's Medical Coll., N. Y.....              |         |     |          |                    | 1                    |            |              | 1     |
| Wooster University, O.....                    |         | 1   |          |                    |                      | 1          |              | 2     |
| Worcester Polytech. Inst., Mass.....          |         |     |          |                    |                      | 1          |              | 1     |
| Yale University.....                          |         | 40  | 42       | 17                 | 7                    | 6          | 1            | 113   |
| Total graduates of domestic institutions..... | 2       | 268 | 309      | 88                 | 160                  | 296        | 85           | 1206  |

TABLE V (continued)

## (B)—HIGHER INSTITUTIONS IN FOREIGN COUNTRIES

|  | College | Law  | Medicine | Applied Science | Political Science | Philosophy | Pure Science | Total |
|--|---------|------|----------|-----------------|-------------------|------------|--------------|-------|
| Acadia University, Nova Scotia.....                |         |      |          |                 |                   | I          |              | I     |
| Bonn University, Germany.....                      |         |      |          |                 |                   |            | I            | I     |
| Gymnasium, Gefle, Sweden.....                      |         |      |          |                 |                   |            | I            | I     |
| Gymnasium, Neuchâtel, Switzerland.....             |         |      |          | I               |                   |            |              | I     |
| Imperial University of Moscow.....                 |         |      | I        |                 |                   |            |              | I     |
| K. K. Lehrer Bildungsanstalt, Vienna.....          |         |      |          |                 |                   | I          |              | I     |
| Keiogioku University, Japan.....                   |         |      |          |                 | I                 |            |              | I     |
| London University.....                             |         |      |          |                 |                   |            | I            | I     |
| McGill University, Canada.....                     |         |      |          |                 |                   | I          | I            | 2     |
| Queens University, Canada.....                     |         |      |          |                 | I                 |            |              | I     |
| Real Gymnasium, Vilna, Russia.....                 |         |      |          |                 | I                 |            |              | I     |
| Robert College, Constantinople.....                |         |      |          | I               |                   |            |              | I     |
| Tokyo Shogyo College, Japan.....                   |         |      |          |                 | I                 |            |              | I     |
| Trinity University, Toronto.....                   |         |      | I        |                 |                   |            |              | I     |
| University of Cambridge.....                       |         |      |          |                 |                   | I          |              | I     |
| University of Geneva.....                          |         |      |          |                 |                   | I          |              | I     |
| University of Havana.....                          |         |      | 3        | 4               |                   |            |              | 7     |
| University of Oxford.....                          |         |      |          |                 |                   | I          |              | I     |
| University of Paris.....                           |         |      |          | I               |                   |            |              | I     |
| University of Rome.....                            |         |      | I        |                 |                   |            |              | I     |
| University of Toronto.....                         |         |      |          |                 |                   | I          |              | I     |
| University of Upsala, Sweden.....                  |         |      | I        |                 |                   |            |              | I     |
| University of Vienna.....                          |         |      |          |                 |                   | I          |              | I     |
| University of Zurich.....                          |         |      |          |                 |                   | I          |              | I     |
| Urmi College, Persia.....                          |         |      | I        |                 |                   |            |              | I     |
| Total graduates of foreign institutions.....       |         |      | 8        | 7               | 4                 | 9          | 4            | 32    |
| Grand total graduates of higher institutions.....  | 2       | 268  | 317      | 95              | 164               | 305        | 89           | 1240  |
| Deduct graduates of more than one institution..... |         | 5    | 10       | 5               | 48                | 61         | 26           | 153   |
| Total students holding degrees.....                | 2       | 263  | 307      | 90              | 118               | 244        | 63           | 1087  |
| Total students enrolled.....                       | 476     | 423  | 797      | 566             | 126               | 244        | 63           | 2695* |
| Percentage holding degrees.....                    | 0.4     | 62.2 | 38.7     | 15.9            | 93.7              | 100.       | 100.         | 40.3  |

The general nature of the previous preparation of our students who are graduates of higher institutions is illustrated by Table VI, which shows the nature of the degrees held by such graduates.

\* Exclusive of 33 auditors.

TABLE VI

## NATURE OF DEGREES HELD BY STUDENTS

| DEGREES   | College | Law | Medicine | Applied Science | Political Science | Philosophy | Pure Science | Total |
|---|---------|-----|----------|-----------------|-------------------|------------|--------------|-------|
| <b>A. Degrees signifying, in general, a liberal education</b>   |         |     |          |                 |                   |            |              |       |
| Bachelor of Arts.....   | 1       | 200 | 205      | 44              | 85                | 180        | 31           | 755   |
| Literature.....   |         | 5   | 3        |                 | 4                 | 7          |              | 19    |
| Philosophy.....   | 1       | 15  | 20       | 4               | 10                | 15         | 5            | 70    |
| Sacred Theology.....  |         |     |          |                 |                   | 1          |              | 1     |
| Science.....  |         | 22  | 55       | 26              | 10                | 27         | 19           | 150   |
| Divinity.....   |         | 1   |          |                 | 9                 | 3          |              | 13    |
| Doctor of Philosophy.....                                       |         | 1   | 3        | 1               |                   | 7          | 2            | 14    |
| Master of Arts.....   |         | 25  | 11       | 1               | 27                | 63         | 20           | 147   |
| Laws.....   |         |     |          |                 | 1                 | 1          |              | 2     |
| Philosophy.....   |         |     |          |                 |                   | 4          | 1            | 5     |
| Science.....  |         |     | 1        |                 | 1                 | 3          | 2            | 7     |
| Literature.....   |         |     | 1        |                 |                   |            |              | 1     |
| Testimonium Maturitatis.....                                    |         |     |          | 1               | 6                 | 6          | 4            | 17    |
| Total.....  | 2       | 278 | 299      | 77              | 157               | 313        | 84           | 1210  |
| <b>B. Degrees signifying, in general, a technical education</b> |         |     |          |                 |                   |            |              |       |
| Bachelor of Agriculture.....                                    |         |     | 1        |                 |                   |            |              | 1     |
| Laws.....   |         | 3   | 2        | 1               |                   | 6          |              | 17    |
| Engineering.....  |         |     |          | 1               | 5                 |            | 1            | 2     |
| Agricultural Science.....                                       |         |     |          |                 |                   |            | 1            | 1     |
| Mining Engineering.....   |         |     |          | 1               |                   |            | 1            | 2     |
| Surgery.....  |         |     | 2        |                 |                   |            |              | 1     |
| Civil Engineer.....   |         | 1   | 1        | 5               |                   | 2          |              | 9     |
| Doctor of Dental Surgery.....                                   |         |     | 1        |                 |                   |            |              | 1     |
| Medicine.....   |         | 1   | 13       | 1               | 3                 | 1          | 2            | 21    |
| Pharmacy.....   |         |     | 1        |                 |                   |            |              | 1     |
| Electrical Engineer.....  |         |     |          | 1               |                   |            |              | 1     |
| Graduate in Pharmacy.....                                       |         |     | 9        | 1               |                   |            |              | 10    |
| Mechanical Engineer.....  |         |     |          | 2               |                   |            |              | 2     |
| Mining Engineer.....  |         |     |          | 5               |                   |            | 1            | 6     |
| Total.....  |         | 5   | 29       | 18              | 8                 | 9          | 6            | 75    |
| Total degrees held.....   | 2       | 283 | 328      | 95              | 165               | 322        | 90           | 1285  |
| Deduct for students holding more than one degree.....           |         | 20  | 21       | 5               | 47                | 78         | 27           | 198   |
| Students holding degrees.....                                   | 2       | 263 | 307      | 90              | 118               | 244        | 63           | 1087  |

At the commencement of June, 1901, a total of 612 degrees was conferred on 596 individuals. This represents an increase of 40 degrees over the corresponding period of last year. In addition, 89 Teachers College diplomas were granted. The accompanying table (Table VII) summarizes these honors.



TABLE VII

## DEGREES AND DIPLOMAS GRANTED, 1900-1901

|   | Men   | Women | Total |
|---|-------|-------|-------|
| <b>A. Degrees conferred in course</b>                 |       |       |       |
| Bachelor of Arts.....                                 | 84    | 50    | 134   |
| "    Laws.....  | 99    | ..... | 99    |
| "    Science (Education).....                         | 2     | 7     | 9     |
| "    Science (Architecture).....                      | 10    | ..... | 10    |
| "    "    (Cheistry).....                             | 8     | ..... | 8     |
| Engineer of Mines.....                                | 14    | ..... | 14    |
| Civil Engineer.....                                   | 16    | ..... | 16    |
| Electrical Engineer.....                              | 19    | ..... | 19    |
| Mechanical Engineer.....                              | 13    | ..... | 13    |
| Doctor of Medicine.....                               | 147   | ..... | 147   |
| Master of Arts.....                                   | 79    | 30    | 109   |
| "    Laws.....  | 2     | ..... | 2     |
| Doctor of Philosophy.....                             | 25    | 1     | 26    |
| Total.....  | 518   | 88    | 606   |
| Deduct duplicates *.....                              | 10    | ..... | 10    |
| Total individuals receiving degrees in course.....    | 508   | 88    | 596   |
| <b>B. Honorary degrees</b>                            |       |       |       |
| Master of Arts.....                                   | 1     | ..... | 1     |
| Master of Science.....                                | 2     | ..... | 2     |
| Doctor of Science.....                                | 1     | ..... | 1     |
| Doctor of Laws.....                                   | 2     | ..... | 2     |
| Total.....  | 6     | ..... | 6     |
| <b>C. Teachers College diplomas granted</b>           |       |       |       |
| Higher diploma.....                                   | 1     | 2     | 3     |
| Secondary ".....                                      | 10    | 27    | 37    |
| Elementary ".....                                     | 2     | 19    | 21    |
| Kindergarten diploma.....                             | ..... | 6     | 6     |
| Domestic Art.....                                     | ..... | 1     | 1     |
| Domestic Science.....                                 | ..... | 7     | 7     |
| Fine Arts.....  | ..... | 6     | 6     |
| Manual Training ".....                                | 4     | 4     | 8     |
| Total.....  | 17    | 73    | 89    |
| Total degrees and diplomas granted.....               | 541   | 160   | 701   |
| Deduct duplicates †.....                              | 18    | 22    | 40    |
| Total individuals receiving degrees and diplomas..... | 523   | 138   | 661   |

The following tables represent in condensed form the titles of the courses in which instruction has been given in each department of the University during the academic year 1900-1901, the officers who have given the courses, the number of hours a week for which the courses have been scheduled, and the number and classification of students authorized to attend the courses.

\* Distributed as follows: LL.B. and A.M., 5; M.D. and A.M., 3; E.M. and A.M., 1; LL.M. and A.M., 1.

† In addition to those noted under \*, the following duplications occur: A.B. and Secondary Diploma, 5 men, 14 women; A.B. and Elementary Diploma, 1 man; A.M. and Secondary Diploma, 1 man, 8 women; A.M. and Higher Diploma, 1 man.

## DEPARTMENT OF ANATOMY

| No.        | Title of Course   | Instructor  | Hours a Week | Students |       |       |                        |
|------------|---|---|--------------|----------|-------|-------|------------------------|
|            |   |   |              | A. B.    | A. M. | M. D. | Special<br>Grand Total |
| 1          | Vertebrate Morphology.....  | Huntington.....                                     | 3            | .....    | ..... | 190   | 3 193                  |
| 2          | Demonstrations to Sections of the Class.....                                    | Martin.....   | 1            | 6        | ..... | 239   | ..... 245              |
| 3          | Demonstrations to Sections of the Class.....                                    | Brockway.....                                       | 2            | 6        | ..... | 239   | ..... 245              |
| 4          | Demonstrations to Sections of the Class.....                                    | Collins.....  | 1            | 6        | ..... | 239   | 47 292                 |
| 5          | Laboratory Course.....  | Huntington, Gallaudet, and Asst. Demonstrators..... | 18-20        | 6        | ..... | 239   | ..... 245              |
| 6          | Laboratory Course.....  | Huntington, Gallaudet, and Asst. Demonstrators..... | 10-12        | .....    | ..... | 190   | ..... 190              |
| 7          | Demonstrations to Sections of the Class.....                                    | Gallaudet.....                                      | 3            | .....    | ..... | 190   | ..... 190              |
| 8          | Demonstrations to Sections of the Class.....                                    | Martin.....   | 2            | .....    | ..... | 190   | ..... 190              |
| 9          | Demonstrations to Sections of the Class.....                                    | Martin.....   | 1            | .....    | ..... | 190   | ..... 190              |
| 10         | Laboratory Courses in Animal Morphology.....                                    | Huntington.....                                     | .....        | .....    | 2     | ..... | ..... 2                |
| 12         | Comparative Morphology of the Carpus.....                                       | Huntington.....                                     | .....        | .....    | ..... | ..... | ..... 1                |
| 14         | Comparative Morphology of the Central Nervous System.....                       | Huntington.....                                     | .....        | .....    | 2     | ..... | ..... 2                |
| 15         | Comparative Myology.....  | Huntington.....                                     | .....        | 1        | ..... | ..... | ..... 1                |
| 18         | Comparative Morphology of the Uro-Genital System.....                           | Huntington.....                                     | .....        | .....    | 1     | ..... | ..... 1                |
| 19         | Cranial Topography.....   | Huntington.....                                     | .....        | .....    | 1     | ..... | ..... 1                |
| 20         | Comparative Morphology of the Heart and Vascular System.....                    | Huntington.....                                     | .....        | .....    | 1     | ..... | ..... 1                |
| 21         | Comparative Morphology of the Alimentary Tract and Digestive Glands.....        | Huntington.....                                     | .....        | .....    | 5     | ..... | ..... 5                |
| 22         | Comparative Morphology of the Cecum and Ileo-Colic Junction in Vertebrates..... | Huntington.....                                     | .....        | .....    | 1     | ..... | ..... 1                |
| 23         | Topography of the Pelvic Viscera, Muscles and Fasciae.....                      | Huntington.....                                     | .....        | .....    | 3     | ..... | ..... 3                |
| Total..... |   |   | .....        | 25       | 16    | 1906  | 51 1998                |

## DEPARTMENT OF ARCHITECTURE

| No.        | Title of Course                             | Instructor                   | Hours a Week | Students |         |             |
|------------|---|------------------------------|--------------|----------|---------|-------------|
|            |   |                              |              | Arch.    | Special | Grand Total |
| 1          | Ancient Arch. History.....                  | Kress.....                   | 3            | 20       | .....   | 20          |
| 2          | Medieval Arch. History.....                 | Ware, Kress.....             | 2            | 32       | 7       | 39          |
| 4          | Theory of Architecture, Form—Dec. Arts..... | Ware.....                    | 1            | 31       | 5       | 36          |
| 5          | History of Ancient Ornament.....            | Hamlin.....                  | 1            | 20       | 3       | 23          |
| 6          | History of Medieval Ornament.....           | Hamlin.....                  | 1            | 30       | 7       | 37          |
| 8          | Elements of Architecture.....               | Partridge.....               | 3            | 18       | 2       | 20          |
| 9a         | Architectural Drawing.....                  | Harriman.....                | 8            | 19       | 2       | 21          |
| 9b         | Frechand Drawing.....                       | Harriman, Partridge.....     | 4            | 29       | 7       | 36          |
| 9c         | Historical Drawing.....                     | Kress.....                   | 2            | 17       | .....   | 17          |
| 10         | Projections, Shades, and Shadows.....       | Sherman.....                 | 3            | 19       | 2       | 21          |
| 11         | Perspective.....                            | Ware.....                    | 12 lectures  | 15       | 4       | 19          |
| 12         | Descriptive Geometry.....                   | Sherman.....                 | 2            | 9        | .....   | 9           |
| 13a        | Specifications.....                         | Warren.....                  | 2            | 17       | 2       | 19          |
| 13b        | Building Materials.....                     | Warren.....                  | 2            | 17       | 1       | 18          |
| 14a        | Arch. Engineering.....                      | Sherman.....                 | 2            | 17       | 1       | 18          |
| 14b        | Arch. Engineering.....                      | Sherman.....                 | 3            | 13       | .....   | 13          |
| 14c        | Arch. Engineering.....                      | Snelling.....                | 6            | 19       | .....   | 19          |
| 15         | Arch. Design.....                           | Ware, Hamlin, Partridge..... | 14           | 49       | 6       | 55          |
| 16         | Archæology, French.....                     | Kress.....                   | 2            | 16       | 1       | 17          |
| 16         | Archæology, German.....                     | Kress.....                   | 2            | 10       | .....   | 10          |
| 17         | Architectural Essays.....                   | Ware, Sherman.....           | 1            | 49       | .....   | 49          |
| 18         | Adv. Architectural History.....             | Ware.....                    | 2            | 11       | .....   | 11          |
| 19         | Adv. Architectural Design.....              | Hamlin, Hornbostel.....      | 25           | 13       | 1       | 14          |
| 20         | Adv. Architectural Engineering.....         | Snelling.....                | 15           | 1        | .....   | 1           |
| Total..... |   |                              |              | 491      | 51      | 542         |

## DEPARTMENT OF ASTRONOMY

| No.        | Title of Course                   | Instructor                     | Hrs.  | Students |       |       |       |       |         |       |       |             |  |  |  |
|------------|-----------------------------------|--------------------------------|-------|----------|-------|-------|-------|-------|---------|-------|-------|-------------|--|--|--|
|            |                                   |                                |       | A.B.     |       | A.M.  | Ph.D. | C.E.  | Special | Total |       | Grand Total |  |  |  |
|            |                                   |                                |       | M.       | W.    |       |       |       |         | M.    | W.    |             |  |  |  |
|            |                                   |                                |       |          |       |       |       |       |         |       |       |             |  |  |  |
| 1          | General Astronomy.....            | Rees, Mitchell, Kretz.....     | 2     | 12       | 7     | 1     | 1     | ..... | 2       | 16    | 7     | 23          |  |  |  |
| 2          | Spherical and Practical Astronomy | Rees, Mitchell, Kretz.....     | 3     | 1        | ..... | 2     | 1     | ..... | .....   | 4     | ..... | 4           |  |  |  |
| 3          | Geodesy.....                      | Rees, Jacoby, Mitchell, Kretz. | 2     | .....    | ..... | 1     | ..... | 16    | 1       | 18    | ..... | 18          |  |  |  |
| 3a         | Geodesy.....                      | Rees, Jacoby.....              | 2     | .....    | ..... | ..... | ..... | 17    | .....   | 17    | ..... | 17          |  |  |  |
| Total..... |                                   |                                | ..... | 13       | 7     | 4     | 2     | 33    | 3       | 55    | 7     | 62          |  |  |  |

## DEPARTMENT OF ARCHITECTURE

| No.        | Title of Course                             | Instructor                   | Hours a Week | Students |         |             |
|------------|---|------------------------------|--------------|----------|---------|-------------|
|            |   |                              |              | Arch.    | Special | Grand Total |
| 1          | Ancient Arch. History.....                  | Kress.....                   | 3            | 20       | .....   | 20          |
| 2          | Medieval Arch. History.....                 | Ware, Kress.....             | 2            | 32       | 7       | 39          |
| 4          | Theory of Architecture, Form—Dec. Arts..... | Ware.....                    | 1            | 31       | 5       | 36          |
| 5          | History of Ancient Ornament.....            | Hamlin.....                  | 1            | 20       | 3       | 23          |
| 6          | History of Medieval Ornament.....           | Hamlin.....                  | 1            | 30       | 7       | 37          |
| 8          | Elements of Architecture.....               | Partridge.....               | 3            | 18       | 2       | 20          |
| 9a         | Architectural Drawing.....                  | Harriman.....                | 8            | 19       | 2       | 21          |
| 9b         | Freehand Drawing.....                       | Harriman, Partridge.....     | 4            | 29       | 7       | 36          |
| 9c         | Historical Drawing.....                     | Kress.....                   | 2            | 17       | .....   | 17          |
| 10         | Projections, Shades, and Shadows.....       | Sherman.....                 | 3            | 19       | 2       | 21          |
| 11         | Perspective.....                            | Ware.....                    | 12 lectures  | 15       | 4       | 19          |
| 12         | Descriptive Geometry.....                   | Sherman.....                 | 2            | 9        | .....   | 9           |
| 13a        | Specifications.....                         | Warren.....                  | 2            | 17       | 2       | 19          |
| 13b        | Building Materials.....                     | Warren.....                  | 2            | 17       | 1       | 18          |
| 14a        | Arch. Engineering.....                      | Sherman.....                 | 2            | 17       | 1       | 18          |
| 14b        | Arch. Engineering.....                      | Sherman.....                 | 3            | 13       | .....   | 13          |
| 14c        | Arch. Engineering.....                      | Snelling.....                | 6            | 19       | .....   | 19          |
| 15         | Arch. Design.....                           | Ware, Hamlin, Partridge..... | 14           | 49       | 6       | 55          |
| 16         | Archæology, French.....                     | Kress.....                   | 2            | 16       | 1       | 17          |
| 16         | Archæology, German.....                     | Kress.....                   | 2            | 10       | .....   | 10          |
| 17         | Architectural Essays.....                   | Ware, Sherman.....           | 1            | 49       | .....   | 49          |
| 18         | Adv. Architectural History.....             | Ware.....                    | 2            | 11       | .....   | 11          |
| 19         | Adv. Architectural Design.....              | Hamlin, Hornbostel.....      | 25           | 13       | 1       | 14          |
| 20         | Adv. Architectural Engineering.....         | Snelling.....                | 15           | 1        | .....   | 1           |
| Total..... |   |                              |              | 491      | 51      | 542         |

## DEPARTMENT OF ASTRONOMY

| No.        | Title of Course                   | Instructor                     | Hrs.  | Students |       |       |       |       |         |       |       |             |  |
|------------|-----------------------------------|--------------------------------|-------|----------|-------|-------|-------|-------|---------|-------|-------|-------------|--|
|            |                                   |                                |       | A.B.     |       | A.M.  | Ph.D. | C.E.  | Special | Total |       | Grand Total |  |
|            |                                   |                                |       | M.       | W.    |       |       |       |         | M.    | W.    |             |  |
|            |                                   |                                |       |          |       |       |       |       |         |       |       |             |  |
| 1          | General Astronomy.....            | Rees, Mitchell, Kretz.....     | 2     | 12       | 7     | 1     | 1     | ..... | 2       | 16    | 7     | 23          |  |
| 2          | Spherical and Practical Astronomy | Rees, Mitchell, Kretz.....     | 3     | 1        | ..... | 2     | 1     | ..... | .....   | 4     | ..... | 4           |  |
| 3          | Geodesy .....                     | Rees, Jacoby, Mitchell, Kretz. | 2     | .....    | ..... | 1     | ..... | 16    | 1       | 18    | ..... | 18          |  |
| 3a         | Geodesy .....                     | Rees, Jacoby.....              | 2     | .....    | ..... | ..... | ..... | 17    | .....   | 17    | ..... | 17          |  |
| Total..... |                                   |                                | ..... | 13       | 7     | 4     | 2     | 33    | 3       | 55    | 7     | 62          |  |

## DEPARTMENT OF BOTANY

| No.        | Title of Course                                    | Instructor     | Hours a Week | Students |       |       |       |       |       |       |       |       |             |
|------------|--|----------------|--------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|
|            |  |                |              | A.B.     | A.M.  |       | Ph.D. |       | M.E.  | C.E.  | Total |       | Grand Total |
|            |  |                |              |          | M.    | W.    | M.    | W.    |       |       | M.    | W.    |             |
|            |  |                |              |          |       |       |       |       |       |       |       |       |             |
| 1          | Elementary Botany.....                             | Curtis.....    | 3            | 6        | 1     | ..... | ..... | ..... | ..... | ..... | 7     | ..... | 7           |
| 2          | Comparative Anatomy of Vascular Plants.....        | Curtis.....    | 3            | 1        | 1     | ..... | ..... | ..... | ..... | ..... | 2     | ..... | 2           |
| 3 & 7      | Plant Physiology.....                              | Curtis.....    | 3            | 2        | 1     | 1     | 1     | ..... | ..... | ..... | 4     | 1     | 5           |
| 4          | General Morphology of Cryptogams.....              | Hove.....      | 2            | 2        | ..... | 1     | 1     | ..... | ..... | ..... | 3     | ..... | 3           |
| 5          | Botanical Problems.....                            | Curtis.....    | 3            | 1        | 1     | ..... | ..... | ..... | ..... | ..... | 2     | ..... | 2           |
| 8          | General Botany.....                                | Underwood..... | 2            | 1        | ..... | ..... | ..... | 38    | 28    | 67    | ..... | ..... | 67          |
| 9          | The natural families of flowering plants.....      | Underwood..... | 2            | .....    | ..... | 1     | 1     | ..... | ..... | ..... | 1     | ..... | 1           |
| 10         | Special Morphology of fungi.....                   | Underwood..... | 10           | .....    | 1     | ..... | ..... | ..... | ..... | ..... | 1     | 1     | 1           |
| 12         | Research in Plant Physiology.....                  | Curtis.....    | 10           | .....    | 1     | 1     | 1     | ..... | ..... | ..... | 1     | 1     | 2           |
| 13         | Embryology of Spermatophyta.....                   | Lloyd.....     | 10           | .....    | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1     | 1           |
| 14         | Critical study of a family or genus of plants..... | Underwood..... | 10           | .....    | ..... | 1     | 1     | ..... | ..... | ..... | 1     | 1     | 2           |
| 15         | Regional Botany.....                               | Underwood..... | 10           | .....    | ..... | 1     | 1     | ..... | ..... | ..... | 1     | ..... | 1           |
| 29         | Physiological Anatomy.....                         | Curtis.....    | 10           | .....    | 1     | ..... | ..... | ..... | ..... | ..... | 1     | ..... | 1           |
| Total..... |  |                | 13           | 5        | 2     | 6     | 3     | 38    | 28    | 90    | 5     | 95    |             |

## DEPARTMENT OF CHEMISTRY

| No.         | Title of Course                   | Instructor                              | Hrs. | Students |      |       |     |      |      |      |          |         |       |          | Grand Total |       |     |     |
|-------------|-----------------------------------|---|------|----------|------|-------|-----|------|------|------|----------|---------|-------|----------|-------------|-------|-----|-----|
|             |                                   |   |      | A.B.     | A.M. | Ph.D. |     | M.E. | C.E. | E.E. | Mech. E. | Met. E. | Chem. | M.D. Sp. |             | Total |     |     |
|             |                                   |   |      |          |      | M.    | W.  |      |      |      |          |         |       |          |             | M.    | W.  |     |
| 1           | General Inorganic Chemistry ..... | Chandler, Laudy, Whitaker, Tucker.....  | 4    | 46       | 1    | ...   | ... | 31   | 25   | 36   | 35       | 3       | 8     | ...      | 12          | 197   | ... | 197 |
| 2           | General Inorganic Chemistry ..... | Pellow, Vulté, Goodell, Chambliss ..... | 4    |          |      |       |     |      |      |      |          |         |       |          |             |       |     | 149 |
| 3           | Physical Chemistry .....          | Morgan .....                            | 4    | 2        |      | 1     |     |      |      |      |          |         | 16    |          | 1           | 20    |     | 20  |
| 4           | Physical Chemistry .....          | Morgan .....                            | 4    |          |      | 6     | 1   |      |      | 1    |          |         | 16    |          | 23          | 1     |     | 24  |
| 5           | Physical Chemistry .....          | Morgan .....                            | 8    |          |      | 2     |     |      |      |      |          |         |       |          |             | 2     |     | 2   |
| 7           | Qualitative Analysis.             | Wells, Whitaker, Dreyfus, Neish.....    |      |          |      |       |     |      |      |      |          |         |       |          |             |       |     |     |
| 9           | Quantitative Analysis             | Miller, Jouët.....                      | 5    | 24       | ...  | ...   | ... | 37   | 29   | 38   | 37       | 3       | 8     | ...      | 3           | 179   | ... | 179 |
| 11          | Quantitative Analysis             | Sherman, Tingle.....                    | 11   | 2        | 3    | 5     | ... | ...  | ...  | 1    | ...      | 3       | 17    | ...      | 1           | 32    | ... | 32  |
| 12          | Quantitative Analysis             | Miller, Jouët.....                      | 3    |          |      |       |     |      |      | 24   | 1        | ...     |       |          |             | 25    | ... | 25  |
| 13          | Quantitative Analysis             | Sherman .....                           | 10   | 1        |      |       |     | 40   |      |      |          |         |       |          | 7           | 48    |     | 48  |
| 14          | Quantitative Analysis             | Miller, Sherman.....                    | 10   |          |      | 7     |     |      |      |      |          |         | 6     |          | 2           | 15    |     | 15  |
| 15          | Advanced Organic Analysis .....   | Sherman .....                           | 7    |          |      | 6     |     |      |      |      |          |         | 4     |          | 10          |       | 10  | 10  |
| 16          | Quantitative Analysis             | Miller.....                             | 7    |          |      | 3     |     |      |      |      |          |         |       |          | 3           | 6     |     | 6   |
| 17          | Assaying .....                    | Miller, Hogarty .....                   | 8    |          |      | 2     |     |      |      |      |          |         |       |          | 1           | 3     |     | 3   |
| 30          | Organic Chemistry .....           | Bogert, Caspari.....                    | 7    | 1        | 1    | 3     |     | 30   |      |      | 1        |         | 7     |          | 10          | 53    |     | 53  |
| 21          | Organic Chemistry .....           | Bogert, Scherr.....                     | 4    |          |      | 3     |     |      |      |      |          |         |       |          | 2           | 5     |     | 5   |
| 23          | Organic Chemistry .....           | Bogert, Caspari.....                    | 12   |          |      | 1     |     |      |      |      |          |         | 10    |          | 1           | 12    |     | 12  |
| 24          | Industrial Chemistry .....        | Chandler, Pellow, Laudy .....           |      |          |      | 2     | 1   |      |      |      |          |         |       |          | 1           | 4     | 1   | 5   |
| 25          | Industrial Chemistry .....        | Chandler, Pellow .....                  | 4    | 19       | 1    |       |     | 32   | 25   | 20   | 30       | 3       | 16    |          | 4           | 150   |     | 150 |
| 26          | Industrial Chemistry .....        | Pellow, Tucker .....                    | 4    |          |      | 4     |     |      |      |      |          |         | 16    |          | 1           | 21    |     | 21  |
| 27          | Industrial Chemistry .....        | Pellow, Tucker .....                    | 3    | 7        | 1    |       |     |      |      | 1    |          |         | 5     |          | 2           | 16    |     | 16  |
| 28          | Industrial Chemistry .....        | Pellow, Tucker .....                    | 3    | 1        |      |       |     |      |      |      |          |         | 8     |          | 1           | 10    |     | 10  |
| 29          | Industrial Chemistry .....        | Pellow, Tucker .....                    | 5    |          | 2    |       |     |      |      |      |          |         |       |          | 1           | 3     |     | 3   |
|             | Industrial Chemistry .....        | Pellow, Tucker .....                    |      | 1        | 1    | 2     |     |      |      | 1    |          |         | 2     |          |             | 7     |     | 7   |
| Total ..... |                                   |   |      | 104      | 11   | 47    | 2   | 170  | 79   | 122  | 104      | 12      | 139   | 149      | 53          | 990   | 2   | 992 |

## DEPARTMENT OF CIVIL ENGINEERING

| No.         | Title of Course  | Instructor                 | Hours<br>a Week | Students |       |       |       |             |            |         | Grand<br>Total |
|-------------|--|----------------------------|-----------------|----------|-------|-------|-------|-------------|------------|---------|----------------|
|             |  |                            |                 | A.B.     | M. E. | C. E. | E. E. | Mech.<br>E. | Met.<br>E. | Special |                |
| 1           | Theory of Surveying, 2d half.....                                | Black.....                 | 2               | 8        | 41    | 29    | ..... | .....       | 2          | 1       | 81             |
| 2           | Road Engineering, 1st half.....                                  | Black.....                 | 2               | .....    | ..... | 22    | ..... | .....       | .....      | .....   | 22             |
| 3           | Water Supply and Irrigation, 2d half..                           | Lovell.....                | 2               | .....    | ..... | 21    | ..... | .....       | .....      | .....   | 21             |
| 4           | Masonry Structures.....  | Lovell, Black.....         | 2               | .....    | ..... | 15    | ..... | .....       | .....      | 2       | 17             |
| 5           | Elasticity and Resistance of Materials..                         | Burr, Lovell.....          | 6               | .....    | 24    | 17    | 24    | .....       | .....      | 3       | 68             |
| 6           | Graphic Statics, 2d half.....                                    | Black.....                 | 4½              | .....    | 22    | 12    | ..... | .....       | .....      | 3       | 37             |
| 7           | Theory of Trusses, 2d half.....                                  | Black.....                 | 4½              | .....    | ..... | 12    | ..... | .....       | .....      | 2       | 14             |
| 8           | Sewage Disposal, 1st half.....                                   | Burr, Black.....           | 2               | .....    | ..... | 14    | ..... | .....       | .....      | 2       | 16             |
| 9           | Railroad Engineering, 5 months.....                              | Lovell.....                | 5½              | .....    | ..... | 20    | ..... | .....       | .....      | 1       | 21             |
| 10          | Design and construction of Bridges,<br>Roofs, and Buildings..... | Burr, Lovell.....          | 4½              | .....    | ..... | 19    | ..... | .....       | .....      | 1       | 20             |
| 11          | Foundations, 1st half.....                                       | Burr.....                  | 4½              | .....    | ..... | 19    | ..... | .....       | .....      | 1       | 20             |
| 12          | Hydraulics, 1st half.....  | Burr.....                  | 2               | .....    | 9     | 20    | ..... | 3           | .....      | 1       | 33             |
| 13          | Sewers and harbors, 2d half.....                                 | Burr.....                  | 2               | .....    | ..... | 21    | ..... | .....       | .....      | .....   | 21             |
| 14          | Theory of Railroad Surveying, 2d half..                          | Lovell.....                | 1               | .....    | ..... | 16    | ..... | .....       | .....      | 2       | 18             |
| 14a         | Railroad Surveying.....  | Lovell.....                | 1               | .....    | 36    | ..... | ..... | .....       | .....      | .....   | 36             |
| 15          | Surveying, between, 1st and 2d Years...                          | Black, Summer School.....  | .....           | .....    | 36    | 21    | ..... | .....       | 2          | .....   | 59             |
| 16          | Surveying, between, 2d and 3d Years...                           | Lovell, Summer School..... | .....           | .....    | 32    | 21    | ..... | .....       | .....      | .....   | 53             |
| 17          | Surveying, between, 3d and 4th Years...                          | Lovell, Summer School..... | .....           | .....    | 18    | 18    | ..... | .....       | 1          | .....   | 37             |
| Total ..... |  |                            |                 | 8        | 218   | 317   | 24    | 3           | 5          | 19      | 594            |



## DEPARTMENT OF ECONOMICS AND SOCIAL SCIENCE

| No.        | Title of Course   | Instructor          | Hours a Week | Students |     |      |     |       |    |         |    |      |       |    |             |
|------------|---|---------------------|--------------|----------|-----|------|-----|-------|----|---------|----|------|-------|----|-------------|
|            |   |                     |              | A.B.     |     | A.M. |     | Ph.D. |    | Special |    | Aud. | Total |    | Grand Total |
|            |   |                     |              | M.       | W.  | M.   | W.  | M.    | W. | M.      | W. |      | M.    | W. |             |
| A          | Outlines of Economics, 2d half.....                         | Mayo-Smith, Day..   | 3            | 117      |     |      |     |       |    | 14      |    | 1    | 132   |    | 132         |
| 1          | Economic History of England and America, 1st half.....      | Seligman, Day....   | 3            | 38       |     |      |     |       |    | 8       |    |      | 46    |    | 46          |
| 3          | Practical Political Economy.....                            | Mayo-Smith.....     | 3            | 31       | 9   | 1    | 8   |       |    | 9       |    |      | 57    | 1  | 58          |
| 4          | Science of Finance.....                                     | Seligman.....       | 2            | 11       | 11  |      | 12  |       |    | 9       |    | 1    | 44    |    | 44          |
| 8          | History of Political Economy.....                           | Seligman.....       | 2            |          | 5   | 1    | 15  |       | 1  | 3       |    | 1    | 24    | 2  | 26          |
| 9          | Economic Theory I., 1st half.....                           | Clark.....          | 2            |          | 7   | 2    | 8   |       | 1  |         |    |      | 15    | 3  | 18          |
| 10         | Economic Theory II., 2d half.....                           | Clark.....          | 2            |          | 6   | 2    | 6   |       |    |         |    |      | 12    | 2  | 14          |
| 11         | Communitistic and Socialistic Theories, 1st half.....       | Clark.....          | 2            | 10       | 5   | 1    | 4   |       |    | 1       |    |      | 20    | 1  | 21          |
| 12         | Theories of Social Reform, 2d half.....                     | Clark.....          | 2            | 10       | 3   | 1    | 4   |       |    | 2       |    |      | 19    | 1  | 20          |
| 14         | Seminar in Political Economy and Finance.....               | Seligman, Clark.... | 2            |          |     |      |     |       |    |         |    |      | ?     | ?  | 18          |
| 15         | Principles of Sociology.....                                | Giddings.....       | 2            | 9        | 6   |      | 4   |       |    | 6       |    | 1    | 27    |    | 27          |
| 16         | Racial Demography, 2d half.....                             | Ripley.....         | 2            |          |     |      | 2   |       |    |         |    |      | 2     |    | 2           |
| 17         | Statistics and Sociology, 1st half.....                     | Mayo-Smith.....     | 2            |          | 4   |      | 11  |       | 1  |         |    |      | 15    | 1  | 16          |
| 18         | Statistics and Economics, 2d half.....                      | Mayo-Smith.....     | 2            |          | 6   |      | 10  |       | 1  |         |    |      | 16    | 1  | 17          |
| 20         | General Sociology, 1st half.....                            | Giddings.....       | 2            |          | 15  | 3    | 9   |       |    | 4       | 2  |      | 28    | 5  | 33          |
| 21         | Progress and Democracy, 2d half.....                        | Giddings.....       | 2            |          | 21  | 2    | 9   |       |    | 4       | 2  |      | 34    | 4  | 38          |
| 22         | Pauperism, Poor Law and Charities, 1st half.....            | Giddings.....       | 2            |          | 3   | 3    | 3   |       | 1  | 3       | 2  |      | 9     | 6  | 15          |
| 23         | Crime and Penology, 2d half.....                            | Giddings.....       | 2            |          | 3   | 2    | 3   |       | 1  | 2       | 2  |      | 8     | 5  | 13          |
| 24         | Civil Aspects of Ecclesiastical Organization, 1st half..... | Bayles.....         | 1            |          |     |      | 2   |       |    | 1       |    |      | 3     |    | 3           |
| 29         | Laboratory Work in Statistics.....                          | Mayo-Smith.....     | 1            |          | 3   |      | 2   |       |    |         |    |      | 5     |    | 5           |
| 30         | Seminar in Sociology.....                                   | Giddings.....       | 1            |          | 10  | 2    | 9   |       | 1  | 1       | 1  |      | 20    | 4  | 24          |
| Total..... |   |                     |              | 226      | 117 | 20   | 121 | 7     | 67 | 9       | 4  | 536+ | 36+   |    | 590         |

## DEPARTMENT OF ELECTRICAL ENGINEERING

| No.        | Title of Course                           | Instructor              | Hours a Week | Students |       |      |      |      |          |         |       |         |             |
|------------|---|-------------------------|--------------|----------|-------|------|------|------|----------|---------|-------|---------|-------------|
|            |   |                         |              | A.B.A.M. | Ph.D. | M.E. | C.E. | E.E. | Mech. E. | Met. E. | Chem. | Special | Grand Total |
| 1          | Dynamo and Motor Practice, 1st.           | Crocker, Sever.         | 3            | 1        |       |      |      | 25   | 23       |         |       | 2       | 51          |
| 2          | Electric Power, 1st half.                 | Crocker.                | 2            |          |       |      |      | 26   | 21       |         |       | 2       | 49          |
| 3          | Electrochemistry.                         | Crocker                 | 1            |          | 3     | 1    |      | 24   |          | 1       | 10    | 4       | 43          |
| 4          | Electric Lighting, 2d half.               | Crocker                 | 3            | 1        |       | 1    |      | 26   | 21       |         |       |         | 50          |
| 5          | Electrical Engineering, 2d half           | Crocker                 | 3½           |          | 2     | 24   | 13   |      |          | 1       | 2     |         | 42          |
| 6          | Telegraph and Telephone.                  | Crocker                 | 1            |          |       |      |      | 27   |          |         |       |         | 28          |
| 7          | Elements of Electrical Engineering.       | Crocker                 | 1½           |          | 1     |      |      |      |          |         |       |         |             |
| 8          | Electric Railway, 2d half.                | Crocker, Townsend.      | 1½           | 3        |       |      | 25   | 23   | 27       |         |       | 1       | 79          |
| 9          | Direct Current Laboratory.                | Sever.                  | 2            |          |       |      |      | 23   | 20       |         |       | 1       | 44          |
| 10         | Alternating Current Laboratory            | Sever, Townsend.        | 1 aft.       |          | 1     |      |      | 26   | 23       |         |       |         | 50          |
| 11         | Electrical Instrument Laboratory          | Aylmer-Small.           | 2 afts.      |          |       |      |      | 26   |          |         |       |         | 26          |
| 12         | Dynamo and Motor Design, 2d.              | Townsend, Aylmer-Small. | 3 afts.      |          |       |      |      | 26   |          |         |       |         | 26          |
| 15         | Management of Electrical Plants, 2d half. | Sever.                  | 2            |          |       |      |      | 23   |          |         |       |         | 23          |
| 22         | Electrical Distribution, 1st half         | Crocker                 | 2            |          |       |      |      | 25   | 21       |         |       | 1       | 47          |
| 23         |   | Crocker                 | 2            |          |       |      |      | 27   | 19       |         |       | 1       | 47          |
| Total..... |   |                         | 3            | 2        | 8     | 26   | 38   | 327  | 175      | 2       | 12    | 12      | 605         |

## DEPARTMENT OF ECONOMICS AND SOCIAL SCIENCE

| No.        | Title of Course   | Instructor           | Hours a Week | Students |       |       |       |       |       |         |       |       |       |       |     | Grand Total |
|------------|---|----------------------|--------------|----------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-----|-------------|
|            |   |                      |              | A.B.     |       | A.M.  |       | Ph.D. |       | Special |       | Aud.  | Total |       |     |             |
|            |   |                      |              | M.       | W.    | M.    | W.    | M.    | W.    | M.      | W.    |       | M.    | W.    |     |             |
| A          | Outlines of Economics, 2d half.....                         | Mayo-Smith, Day..    | 3            | 117      | ..... | ..... | ..... | ..... | ..... | 14      | ..... | 1     | 132   | ..... | 132 |             |
| 1          | Economic History of England and America, 1st half.....      | Seligman, Day.....   | 3            | 38       | ..... | ..... | ..... | ..... | ..... | 8       | ..... | ..... | 46    | ..... | 46  |             |
| 3          | Practical Political Economy.....                            | Mayo-Smith.....      | 3            | 31       | 9     | 1     | 8     | ..... | ..... | 9       | ..... | ..... | 57    | 1     | 58  |             |
| 4          | Science of Finance.....                                     | Seligman.....        | 2            | 11       | 11    | ..... | 12    | ..... | ..... | 9       | ..... | 1     | 44    | ..... | 44  |             |
| 8          | History of Political Economy.....                           | Seligman.....        | 2            | .....    | 5     | 1     | 15    | 1     | ..... | 3       | ..... | 1     | 24    | ..... | 26  |             |
| 9          | Economic Theory I., 1st half.....                           | Clark.....           | 2            | .....    | 7     | 2     | 8     | 1     | ..... | .....   | ..... | ..... | 15    | 3     | 18  |             |
| 10         | Economic Theory II., 2d half.....                           | Clark.....           | 2            | .....    | 6     | 2     | 6     | ..... | ..... | .....   | ..... | ..... | 12    | 2     | 14  |             |
| 11         | Communitic and Socialistic Theories, 1st half.....          | Clark.....           | 2            | 10       | 5     | 1     | 4     | ..... | ..... | 1       | ..... | ..... | 20    | 1     | 21  |             |
| 12         | Theories of Social Reform, 2d half.....                     | Clark.....           | 2            | 10       | 3     | 1     | 4     | ..... | ..... | 2       | ..... | ..... | 19    | 1     | 20  |             |
| 14         | Seminar in Political Economy and Finance.....               | Seligman, Clark..... | 2            | .....    | ..... | ..... | ..... | ..... | ..... | .....   | ..... | ..... | ?     | ?     | 18  |             |
| 15         | Principles of Sociology.....                                | Giddings.....        | 2            | .....    | 6     | ..... | 4     | ..... | ..... | 6       | ..... | 1     | 27    | ..... | 27  |             |
| 16         | Racial Demography, 2d half.....                             | Ripley.....          | 2            | 9        | ..... | ..... | 2     | ..... | ..... | .....   | ..... | ..... | 2     | ..... | 2   |             |
| 17         | Statistics and Sociology, 1st half.....                     | Mayo-Smith.....      | 2            | .....    | 4     | ..... | 11    | 1     | ..... | .....   | ..... | ..... | 15    | 1     | 16  |             |
| 18         | Statistics and Economics, 2d half.....                      | Mayo-Smith.....      | 2            | .....    | 6     | ..... | 10    | 1     | ..... | .....   | ..... | ..... | 16    | 1     | 17  |             |
| 20         | General Sociology, 1st half.....                            | Giddings.....        | 2            | .....    | 15    | 3     | 9     | ..... | ..... | 4       | 2     | ..... | 28    | 5     | 33  |             |
| 21         | Progress and Democracy, 2d half.....                        | Giddings.....        | 2            | .....    | 21    | 2     | 9     | ..... | ..... | 4       | 2     | ..... | 34    | 4     | 38  |             |
| 22         | Pauperism, Poor Law and Charities, 1st half.....            | Giddings.....        | 2            | .....    | 3     | 3     | 3     | 1     | ..... | 3       | 2     | ..... | 9     | 6     | 15  |             |
| 23         | Crime and Penology, 2d half.....                            | Giddings.....        | 2            | .....    | 3     | 2     | 3     | 1     | ..... | 2       | 2     | ..... | 8     | 5     | 13  |             |
| 24         | Civil Aspects of Ecclesiastical Organization, 1st half..... | Bayles.....          | 1            | .....    | ..... | ..... | 2     | ..... | ..... | 1       | ..... | ..... | 3     | ..... | 3   |             |
| 29         | Laboratory Work in Statistics.....                          | Mayo-Smith.....      | 1            | .....    | 3     | ..... | 2     | ..... | ..... | .....   | ..... | ..... | 5     | ..... | 5   |             |
| 30         | Seminar in Sociology.....                                   | Giddings.....        | 1            | .....    | 10    | 2     | 9     | 1     | ..... | 1       | 1     | ..... | 20    | 4     | 24  |             |
| Total..... |   |                      |              | 226      | 117   | 20    | 121   | 7     | 67    | 9       | 4     | 536+  | 36+   | 590   |     |             |

## DEPARTMENT OF ELECTRICAL ENGINEERING

| No.        | Title of Course                               | Instructor                         | Hours a Week | Students |       |      |      |      |          |         |       |         |     | Grand Total |
|------------|---|------------------------------------|--------------|----------|-------|------|------|------|----------|---------|-------|---------|-----|-------------|
|            |   |                                    |              | A.B.A.M. | Ph.D. | M.E. | C.E. | E.E. | Mech. E. | Met. E. | Chem. | Special |     |             |
| 1          | Dynamo and Motor Practice, 1st.....           | Crocker, Sever.....                | 3            | 1        |       |      |      | 25   | 23       |         |       | 2       | 51  |             |
| 2          | Electric Power, 1st half.....                 | Crocker.....                       | 2            |          |       |      |      | 26   | 21       |         |       | 2       | 49  |             |
| 3          | Electrochemistry.....                         | Crocker.....                       | 1            |          | 3     | 1    |      | 24   |          | 1       | 10    | 4       | 43  |             |
| 4          | Electric Lighting, 2d half.....               | Crocker.....                       | 3            | 1        | 1     | 1    |      | 26   | 21       |         |       |         | 50  |             |
| 5          | Electrical Engineering, 2d half.....          | Crocker.....                       | 3½           |          | 2     | 24   | 13   |      |          | 1       | 2     |         | 42  |             |
| 6          | Telegraph and Telephone.....                  | Crocker.....                       | 1            |          | 1     |      |      | 27   |          |         |       |         | 28  |             |
| 7          | Elements of Electrical Engineering.....       | Crocker, Townsend.....             | 1½           | 3        |       |      | 25   | 23   | 27       |         |       | 1       | 79  |             |
| 8          | Electric Railway, 2d half.....                | Sever.....                         | 2            |          |       |      |      | 23   | 20       |         |       | 1       | 44  |             |
| 10         | Direct Current Laboratory.....                | Sever.....                         | 1 aft.       |          | 1     |      |      | 26   | 23       |         |       |         | 50  |             |
| 11         | Alternating Current Laboratory.....           | Sever, Townsend, Aylmer-Small..... | 1 aft.       |          |       |      |      |      |          |         |       |         |     |             |
| 12         | Electrical Instrument Laboratory.....         | Aylmer-Small.....                  | 2 afts.      |          |       |      |      | 26   |          |         |       |         | 26  |             |
| 15         | Dynamo and Motor Design, 2d.....              | Townsend, Aylmer-Small.....        | 3 afts.      |          |       |      |      | 26   |          |         |       |         | 26  |             |
| 22         | Management of Electrical Plants, 2d half..... | Sever.....                         | 2            |          |       |      |      | 23   |          |         |       |         | 23  |             |
| 23         | Electrical Distribution, 1st half.....        | Crocker.....                       | 2            |          |       |      |      | 25   | 21       |         |       | 1       | 47  |             |
|            |   | Crocker.....                       | 2            |          |       |      |      | 27   | 19       |         |       | 1       | 47  |             |
| Total..... |   |                                    |              | 3        | 2     | 8    | 26   | 327  | 175      | 2       | 12    | 12      | 605 |             |

## DEPARTMENT OF ENGLISH

| No.   | Title of Course  | Instructor   | Hours a Week | Students |    |       |    |        |    |                 |       |    |     | Grand Total |     |
|-------|--|--|--------------|----------|----|-------|----|--------|----|-----------------|-------|----|-----|-------------|-----|
|       |  |  |              | A. B.    |    | A. M. |    | Ph. D. |    | Special Auditor | Total |    |     |             |     |
|       |  |  |              | M.       | W. | M.    | W. | M.     | W. |                 | M.    | W. |     |             |     |
| A     | Rhetoric and English Composition   | G. R. Carpenter, Brewster, Odell, Carleton, Putnam | 3            | 109      |    |       |    |        |    |                 | 15    |    | 124 |             | 124 |
| B     | English Composition.....   | Odell, Brewster, Carleton                          | 2            | 110      |    |       |    |        |    |                 | 9     |    | 119 |             | 119 |
| 1     | English Composition.....   | G. R. Carpenter                                    | 3            | 53       |    |       |    |        |    |                 | 4     |    | 57  |             | 57  |
| 2     | English Composition.....   | G. R. Carpenter                                    | 3            | 45       |    |       |    |        |    |                 | 3     |    | 48  |             | 48  |
| 4     | Elocution.....   | Putnam   | 2            | 39       |    | 2     |    | 5      |    |                 | 7     |    | 53  |             | 53  |
| 6     | Argumentative Composition.....   | Carleton   | 3            | 16       |    | 1     |    |        |    |                 | 1     |    | 18  |             | 18  |
| 7     | Theory of English Usage.....   | G. R. Carpenter                                    | 2            | 2        |    | 8     | 13 | 1      | 1  | 2               |       |    | 13  | 14          | 27  |
| 8     | English Composition.....   | Brewster.  | 3            | 8        |    |       |    |        |    |                 | 3     |    | 11  |             | 11  |
| 15    | Anglo-Saxon Literature and Historical English Grammar.....   | Krapp.....   | 2            | 13       |    | 4     | 1  | 1      | 1  |                 |       |    | 18  | 2           | 20  |
| 16    | Anglo-Saxon Literature, Poetry, and Prose.....   | Krapp.....   | 2            | 1        |    | 3     |    |        | 1  |                 |       |    | 4   | 1           | 5   |
| 17    | Chaucer.....   | Price.....   | 2            | 1        |    | 6     | 2  | 7      |    |                 |       |    | 14  | 2           | 16  |
| 19    | Shakespeare.....   | Price.....   | 2            | 5        |    | 1     | 3  |        |    | 3               |       |    | 9   | 3           | 12  |
| 21    | American Literature.....   | Brander Matthews, Krapp.....                       | 2            | 73       |    |       |    |        |    | 9               |       |    | 82  |             | 82  |
| 22    | The History of the English Novel.....  | Brander Matthews.....                              | 2            | 36       |    |       |    | 1      |    | 6               |       |    | 43  |             | 43  |
| 31    | English Language and Literature of the Fourteenth Century, exclusive of Chaucer, and of the Fifteenth Century..... | Price.....   | 2            |          |    | 1     |    | 3      | 1  |                 |       |    | 4   | 1           | 5   |
| 34    | English Verse Forms.....   | Price.....   | 2            |          |    | 1     | 1  | 3      |    |                 |       |    | 4   | 1           | 5   |
| 41    | Dramatists of the Nineteenth Century.....  | Brander Matthews.....                              | 2            | 1        |    | 12    |    | 5      |    | 2               |       |    | 20  |             | 20  |
| 43    | English Comedy.....  | Brander Matthews.....                              | 2            | 2        |    | 10    |    | 7      |    | 2               |       |    | 21  |             | 21  |
| 46    | English Literature from 1625 to 1660.....  | Trent.....   | 2            |          |    | 9     | 10 | 9      | 7  | 1               |       |    | 17  | 21          | 38  |
| 48    | English Literature in the Second Half of the Eighteenth Century.....   | Trent.....   | 2            | 1        | 5  | 8     | 5  | 9      | 1  |                 |       |    | 18  | 13          | 31  |
| Total |  |  |              | 515      | 14 | 67    | 34 | 49     | 6  | 66              | 4     |    | 697 | 58          | 755 |

## DEPARTMENT OF GENITO-URINARY AND VENEREAL DISEASES

| No.        | Title of Course   | Instructor  | Hours<br>a Week | Students |                |
|------------|---|-------------|-----------------|----------|----------------|
|            |   |             |                 | M.D.     | Grand<br>Total |
| 1          | Venereal and Genito-Urinary Diseases.....                     | Taylor..... | 1               | 151      | 151            |
| 2          | Practical Instruction at the Vanderbilt Clinic.....           | Hayden..... | .....           | 151      | 151            |
| 3          | Hospital Clinics in Venereal and Genito-Urinary Diseases..... | Taylor..... | 1               | ?        | ?              |
| Total..... |   |             | .....           | 302+     | 302+           |

## DEPARTMENT OF GEOLOGY

| No.        | Title of Course                              | Instructor                    | Hours a Week | Students |       |       |       |       |       |         |         |       |       |             |
|------------|--|-------------------------------|--------------|----------|-------|-------|-------|-------|-------|---------|---------|-------|-------|-------------|
|            |  |                               |              | A.R.     | A.M.  | Ph.D. |       | M.E.  | C. E. | Met. E. | Special | Total |       | Grand Total |
|            |  |                               |              |          |       | M.    | W.    |       |       |         |         | M.    | W.    |             |
| 1          | General Geology.....                         | Hollick.....                  | 3            | 19       | ..... | ..... | ..... | 1     | 1     | 1       | 3       | 25    | ..... | 25          |
| 2          | General Geology.....                         | Kemp, Julien, Van Ingen.....  | 3            | .....    | 1     | ..... | ..... | 34    | 14    | 2       | 5       | 56    | ..... | 56          |
| 3          | Economic Geology.....                        | Julien.....                   | 2            | 1        | 5     | 2     | ..... | 32    | ..... | 1       | 4       | 45    | ..... | 45          |
| 4          | Petrography, 2 months, 2d half.....          | Julien.....                   | 7            | .....    | ..... | 1     | ..... | 33    | ..... | 2       | .....   | 36    | ..... | 36          |
| 6          | Petrology.....                               | Julien.....                   | 4            | .....    | 7     | 2     | 1     | 9     | ..... | .....   | 2       | 20    | 1     | 21          |
| 7          | Invertebrate Palaeontology.....              | Van Ingen.....                | 4            | .....    | 1     | 1     | 1     | ..... | ..... | .....   | .....   | 2     | 1     | 3           |
| 9          | Palaeobotany.....                            | Hollick.....                  | 3            | .....    | 1     | 2     | 1     | ..... | ..... | .....   | .....   | 3     | 1     | 4           |
| 10         | Geological Examinations and Surveys.....     | Kemp, Van Ingen.....          | 1            | .....    | ..... | ..... | 1     | ..... | 9     | .....   | 2       | 12    | ..... | 12          |
| 13         | Field Geology, between 3d and 4th Years..... | Kemp, Hollick, Van Ingen..... | Sum.         | .....    | ..... | ..... | ..... | 30    | ..... | .....   | .....   | 30    | ..... | 30          |
| Total..... |  |                               | 20           | 15       | 9     | 3     | 148   | 15    | 6     | 16      | 229     | 3     | 232   |             |

NOTE.—1 Ph.D. (M.) and 1 Ph.D. (W.) were enrolled in the courses Geography 2 and 3, Elementary Physical Geography and Geography of the United States (3 hrs.,  $\frac{1}{2}$  yr. each) given by Professor Dodge.

## DEPARTMENT OF GERMANIC LANGUAGES

|            |  |                          | Students |      |     |      |     |       |     |      |      |      |          |       |       |       |     |      |       |     |             |  |
|------------|--|--------------------------|----------|------|-----|------|-----|-------|-----|------|------|------|----------|-------|-------|-------|-----|------|-------|-----|-------------|--|
| No.        | Title of Course  | Instructor               | Hrs.     | A.B. |     | A.M. |     | Ph.D. |     | M.E. | C.E. | E.E. | Mech. E. | Chem. | Arch. | Spec. |     | Aud. | Total |     | Grand Total |  |
|            |  |                          |          | M.   | W.  | M.   | W.  | M.    | W.  |      |      |      |          |       |       | M.    | W.  |      | M.    | W.  |             |  |
| A          | Elementary Course.                                     | Hervey, Tombo.           | 3        | 57   | 1   | 1    | 4   | ...   | 1*  | 5*   | 6*   | 2*   | ...      | ...   | ...   | ...   | 6   | ...  | 84    | 1   | 85          |  |
| 1          | Elementary Course.                                     | Tombo, Keppler           | 6        | 9    | ... | ...  | 1   | ...   | ... | ...  | 1*   | ...  | ...      | ...   | 1*    | ...   | 1   | ...  | 13    | ... | 13          |  |
| 2          | Grammar, Reading, Composition.                         | Remy, Keppler..          | 3        | 71   | 3   | ...  | 1   | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | 6     | 1   | ...  | 81    | 1   | 82          |  |
| 3          | Selected Works of Goethe, Schiller, and Lessing        | Hervey.....              | 3        | 34   | ... | ...  | 1   | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | 4     | ... | ...  | 39    | ... | 39          |  |
| 4          | Historical Prose.                                      | Tombo.....               | 3        | 13   | ... | ...  | 1   | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | 2     | ... | ...  | 15    | 1   | 16          |  |
| 5          | Scientific German.                                     | Remy.....                | 3        | ...  | ... | ...  | 3   | ...   | ... | ...  | ...  | 1*   | ...      | ...   | ...   | ...   | ... | ...  | 4     | ... | 4           |  |
| 6          | History of German Literature.                          | Thomas.....              | 2        | 16   | 2   | 2    | 1   | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | ...   | ... | 1    | 19    | 3   | 22          |  |
| 7          | Goethe's Faust.  | Thomas.....              | 2        | 5    | 2   | ...  | ... | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | ...   | 1   | ...  | 7     | 1   | 8           |  |
| 8          | Practice in Speaking and Writing German.               | Tombo.....               | 2        | 13   | ... | ...  | 1   | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | ...   | ... | ...  | 14    | ... | 14          |  |
| 9          | History of the German Language.                        | W. H. Carpenter          | 2        | 3    | 2   | 2    | ... | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | ...   | ... | ...  | 5     | 2   | 7           |  |
| 10         | Great German Writers.                                  | Thomas.....              | 2        | 3    | ... | 1    | 1   | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | ...   | 1   | ...  | 4     | 2   | 6           |  |
| 11         | Old High German.                                       | W. H. Carpenter          | 2        | 2    | 1   | 2    | 2   | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | ...   | 1   | ...  | 5     | 3   | 8           |  |
| 15         | Icelandic.   | W. H. Carpenter          | 2        | 1    | ... | ...  | 1   | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | ...   | ... | ...  | 2     | ... | 2           |  |
| 17         | Gothic.  | Remy.....                | 2        | 1    | 1   | 3    | ... | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | ...   | 1   | ...  | 2     | 4   | 6           |  |
| 18         | General Introduction to Germanic Philology.            | W. H. Carpenter          | 2        | ...  | 1   | 2    | 1   | 1     | ... | ...  | ...  | ...  | ...      | ...   | ...   | ...   | 1   | ...  | 2     | 4   | 6           |  |
| 20         | Geschichte der deutschen Litteratur im 19 Jahrhundert. | Thomas.....              | 2        | 1    | ... | 3    | ... | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | 1     | ... | ...  | 2     | 3   | 5           |  |
|            | Seminar.   | W. H. Carpenter, Thomas. | 2        | ...  | ... | 3    | 6   | ...   | ... | ...  | ...  | ...  | ...      | ...   | ...   | ...   | ... | ...  | 6     | 3   | 9           |  |
| Total..... |  |                          |          | 229  | 13  | 19   | 23  | 2     | 1   | 5    | 7    | 2    | 3        | 1     | 20    | 6     | 1   | 304  | 28    | 332 |             |  |

\* These students elected German as an optional study.

## DEPARTMENT OF GREEK

| No.        | Title of Course  | Instructor          | Hours a Week | Students |    |       |    |        |    |         |       |    |             |
|------------|--|---------------------|--------------|----------|----|-------|----|--------|----|---------|-------|----|-------------|
|            |  |                     |              | A. B.    |    | A. M. |    | Ph. D. |    | Special | Total |    | Grand Total |
|            |  |                     |              | M.       | W. | M.    | W. | M.     | W. |         | M.    | W. |             |
| A          | Elementary Course.....   | Rogers.....         | 3            | 5        | .. | ..    | .. | ..     | .. | ..      | 7     | .. | 7           |
| B          | Selected Orations of Lysias, Homer's Odyssey.....                                      | Young, Rogers.....  | 3            | 35       | .. | ..    | .. | ..     | .. | 1       | 36    | .. | 36          |
| 3          | Euripides' Iphigenia in Tauris, and Demosthenes' Olynthiac and Philippic Orations..... | Young, Rogers.....  | 3            | 20       | .. | ..    | .. | ..     | .. | 2       | 22    | .. | 22          |
| 6          | Æschylus' Prometheus and Sophocles' Antigones, Thucydides.....                         | Young, Rogers.....  | 3            | 10       | .. | ..    | .. | ..     | .. | ..      | 10    | .. | 10          |
| 7          | Advanced Greek Prose Composition.....  | Wheeler.....        | 2            | 3        | .. | 3     | 3  | 1      | 1  | ..      | 7     | 4  | 11          |
| 8          | Aristotle's Constitution of Athens.....  | Young.....          | 3            | ..       | .. | 2     | 1  | ..     | .. | ..      | 3     | 1  | 4           |
| 9          | Lectures on Greek Literature.....  | Wheeler.....        | 3            | 2        | 2  | 2     | 2  | 4      | 4  | ..      | 8     | 2  | 10          |
| 15         | Selections from the Greek Christian Fathers.....                                       | Young.....          | 2            | 6        | .. | 2     | .. | 1      | .. | ..      | 9     | .. | 9           |
| 17         | Introduction to Greek Archaeology.....   | Wheeler.....        | 2            | ..       | 2  | 4     | .. | ..     | .. | ..      | 4     | 2  | 6           |
| 19         | Lectures on the Manners and Customs of the Ancient Greeks.....                         | Young.....          | 2            | 2        | 2  | 2     | 1  | 2      | .. | ..      | 6     | 3  | 9           |
| 20         | Readings from Pausanias. Lectures on the Monuments of Olympia and Attica.              | Wheeler, Young..... | 2            | 1        | 2  | 2     | 2  | 1      | 3  | ..      | 4     | 7  | 11          |
| 34         | Greek and Latin Syntax.....  | Lodge.....          | 2            | ..       | .. | 3     | 1  | ..     | .. | ..      | 3     | 1  | 4           |
|            | Seminar.....   | Earle.....          | 3            | ..       | .. | 5     | 4  | 5      | 4  | ..      | 10    | 8  | 18          |
| Total..... |  |                     | 84           | 8        | 8  | 25    | 12 | 15     | 8  | 5       | 120   | 28 | 157         |



## DEPARTMENT OF HISTORY AND POLITICAL PHILOSOPHY.

| No. | Title of Course  | Instructor          | Hours a Week | Students |    |       |    |        |    |         |    |      |       |   |             |
|-----|--|---------------------|--------------|----------|----|-------|----|--------|----|---------|----|------|-------|---|-------------|
|     |  |                     |              | A. B.    |    | A. M. |    | Ph. D. |    | Special |    | Aud. | Total |   | Grand Total |
|     |  |                     |              | M.       | W. | M.    | W. | M.     | W. | M.      | W. |      |       |   |             |
|     |  |                     |              |          |    |       |    |        |    |         |    |      |       |   |             |
| A   | Epochs of Ancient, Mediæval, and Modern History.....   | Shepherd, Shotwell. | 3            | 140      |    |       |    |        |    | 13      |    |      | 153   |   | 153         |
| 1   | Mediæval and Modern Political History to 1684.....   | Shepherd            | 2            | 8        | 1  |       |    |        |    |         |    |      | 9     |   | 9           |
| 2   | Continental European History.....  | Dunning, Shepherd.  | 2            | 5        |    | 2     |    |        | 2  |         |    |      | 7     | 2 | 9           |
| 3   | English History of the Reform Bill, 1832.....  | Shepherd.           | 2            | 17       |    |       |    |        | 2  |         |    |      | 19    |   | 19          |
| 4   | History of the United States to the close of Reconstruction.....                                 | Dunning             | 3            | 29       |    |       |    |        | 5  |         |    |      | 34    |   | 34          |
| 5   | Transition Epochs in European History  | Sloane              | 2            | 28       |    |       |    |        | 1  |         |    |      | 29    |   | 29          |
| 11  | The Development of European Culture during the Middle Ages and Renaissance. The Reformation..... | Robinson            | 2            | 11       | 4  | 6     | 5  |        | 3  | 3       |    |      | 23    | 9 | 32          |
| 13  | Opening of the Lutheran Reformation.   | Robinson            | 2            |          | 1  |       | 4  | 1      |    |         |    |      | 5     | 1 | 6           |
| 14a | Continental History, 1st half.....   | Robinson            | 2            | 8        | 4  | 2     | 8  | 1      |    | 1       |    |      | 20    | 4 | 24          |
| 14b | Continental History, 2d half.....  | Sloane              | 2            | 8        | 2  | 1     | 7  |        |    |         |    |      | 17    | 1 | 18          |
| 15  | The Work of Napoleon, 1st half.....  | Sloane              | 2            |          |    |       | 4  | 1      |    |         |    |      | 4     | 1 | 5           |
| 16  | The Constitutional History of England to 1689.....   | Osgood..            | 2            |          | 9  | 2     | 5  |        | 2  |         |    |      | 16    | 2 | 18          |
| 19  | Early Church History.....  | *                   | 2            |          | 1  |       | 1  |        |    |         |    |      | 2     |   | 2           |
| 20  | Mediæval Church History.....   | *                   | 2            |          | 1  |       | 1  |        |    |         |    |      | 2     |   | 2           |

|   |     |       |       |       |       |       |       |       |       |     |       |    |
|---|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|----|
| 22 Seminar in Later Medieval and Modern European History.....     | 1   | 2     | 3     | 1     | ..... | ..... | ..... | ..... | ..... | 5   | 1     | 6  |
| 26 Seminar in Early Church History.....                           | *   | ..... | 1     | ..... | ..... | ..... | ..... | ..... | ..... | 1   | ..... | 1  |
| 31 Political and Constitutional History of the United States..... | 2   | 27    | 7     | ..... | 8     | ..... | ..... | ..... | ..... | 76  | ..... | 76 |
| 33 American Colonial History during the Eighteenth Century.....   | 2   | 8     | 11    | 1     | ..... | ..... | ..... | ..... | ..... | 20  | 6     | 26 |
| 34 European Politics and the War of 1812, 2d half.....            | 2   | 1     | 3     | ..... | ..... | ..... | ..... | ..... | ..... | 4   | ..... | 4  |
| 37 Seminar in American Colonial History.....                      | 1   | 5     | 1     | ..... | ..... | ..... | ..... | ..... | ..... | 6   | 1     | 7  |
| 40 General History of Political Theories.....                     | 2   | 40    | 4     | ..... | 2     | ..... | ..... | ..... | ..... | 57  | ..... | 57 |
| 41 American Political Philosophy.....                             | 2   | 5     | 4     | ..... | 1     | ..... | ..... | ..... | ..... | 10  | ..... | 10 |
| 42 Seminar in Political Philosophy.....                           | 1   | 2     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2   | ..... | 2  |
| Total.....  | 321 | 91    | 69    | 5     | 39    | 5     | 1     | 521   | 28    | 549 |       |    |

\* Given at the Union Theological Seminary.

## DEPARTMENT OF GYNECOLOGY

| No.        | Title of Course  | Instructor                  | Hours a Week | Students |         |             |
|------------|--|-----------------------------|--------------|----------|---------|-------------|
|            |  |                             |              | M.D.     | Special | Grand Total |
| 1          | The Principles and Practice of Gynecology.....                                 | Tuttle (from March 15)..... | 3            | 151      | 1       | 152         |
| 2          | Clinical Instruction at the Vanderbilt Clinic.....                             | Tuttle.....                 | 1            | 296 ?    | .....   | 296         |
| 3          | Practical Instruction in Diagnosis, Treatment, and the Use of Instruments..... | Jarman and Stone.....       | 6 les.       | 151      | .....   | 151         |
| 4          | Hospital Clinics in Operative Gynecology.....                                  | Tuttle.....                 | 3            | ?        | .....   | ?           |
| Total..... |  |                             |              | 598+     | 1       | 599+        |

## DEPARTMENT OF INDO-IRANIAN LANGUAGES

| No. | Title of Courses                          | Instructor             | Hours<br>a Week | Students |       |       |       |         |       |       |       |                |
|-----|---|------------------------|-----------------|----------|-------|-------|-------|---------|-------|-------|-------|----------------|
|     |   |                        |                 | A.B.     | A.M.  | Ph.D. |       | Special | Aud.  | Total |       | Grand<br>Total |
|     |   |                        |                 |          |       | M.    | W.    |         |       | M.    | W.    |                |
| 1   | Elementary Course Sanskrit.....           | Jackson, Gray.....     | 3               | 3        | 1     | 1     | ..... | 2       | ..... | 7     | ..... | 7              |
| 3   | Advanced Course Sanskrit.....             | Jackson, Gray.....     | 2               | 1        | 1     | 1     | ..... | .....   | ..... | 3     | ..... | 3              |
| 4   | Avestan, Advanced Course.....             | Jackson, Yohannan..... | 2               | .....    | 1     | ..... | ..... | 1       | ..... | 3     | ..... | 3              |
| 5   | Pali.....                                 | Jackson.....           | 1               | .....    | ..... | 1     | ..... | .....   | ..... | 1     | ..... | 1              |
| 8   | Sanskrit Literature.....                  | Jackson, Gray.....     | 1               | .....    | 1     | 1     | ..... | 1       | ..... | 3     | ..... | 3              |
| 11  | Modern Persian.....                       | Yohannan.....          | 2               | 1        | ..... | 1     | ..... | .....   | ..... | 2     | ..... | 2              |
| 12  | Modern Persian, advanced.....             | Yohannan.....          | 2               | .....    | ..... | 1     | ..... | .....   | ..... | 1     | ..... | 1              |
|     | Seminar.....                              | Jackson.....           | .....           | .....    | ..... | 1     | ..... | .....   | ..... | 1     | ..... | 1              |
|     | Armenian.....                             | Yohannan.....          | 2               | .....    | ..... | 1     | ..... | 1       | ..... | 2     | ..... | 2              |
|     | Turkish.....                              | Yohannan.....          | 2               | .....    | 1     | ..... | ..... | .....   | ..... | 1     | ..... | 1              |
|     | Introduction to the Science of Language.. | Jackson, Gray.....     | 2               | 1        | 2     | ..... | 1     | .....   | 1     | 3     | 2     | 5              |
|     | Total.....                                | Total.....             | .....           | 6        | 7     | 9     | 1     | 5       | 1     | 27    | 2     | 29             |

## DEPARTMENT OF LARYNGOLOGY

| No. | Title of Course   | Instructor       | Hours a<br>Week | Students. |                |
|-----|---|------------------|-----------------|-----------|----------------|
|     |   |                  |                 | M.D.      | Grand<br>Total |
|     |   |                  |                 |           |                |
| 1   | A Systematic Course of Didactic Lectures.....   | Lefferts.....    | 1               | 147       | 147            |
| 2   | Practical Clinical Instruction in the Laryngological Hall of the Vanderbilt Clinic to Sections of the 4th Class in the Use of the Laryngoscope, Rhinoscope, and Tongue Spatula..... | Simpson.....     | 3               | 147       | 147            |
| 3   | Individual Clinical Demonstrations, Pathological, Differential, Diagnostic, etc.....  | Frohningham..... | .....           | 147       | 147            |
|     | Total.....  | Total.....       | .....           | 441       | 441            |

## DEPARTMENT OF LATIN

| No.        | Title of Course  | Instructor         | Hours a Week | Students |    |       |    |        |    |         |     |       |     |    |    | Grand Total |
|------------|--|--------------------|--------------|----------|----|-------|----|--------|----|---------|-----|-------|-----|----|----|-------------|
|            |  |                    |              | A. B.    |    | A. M. |    | Ph. D. |    | Special |     | Total |     |    |    |             |
|            |  |                    |              | M.       | W. | M.    | W. | M.     | W. | M.      | W.  | M.    | W.  |    |    |             |
| X          | Elementary Course.....   | Olcott.....        | 5            | 9        |    |       |    |        |    |         |     |       |     | 14 |    | 14          |
| A          | Livy, Book I, 1st half. Odes and Epodes of Horace, 2d half.....  | Olcott, Burchell.. | 3            | 74       |    |       |    |        |    |         |     | 5     |     | 77 |    | 77          |
| B          | Readings of selections in prose and verse illustrative of the public and private life of the Romans..... | McCrea.....        | 3            | 33       |    |       |    |        |    |         |     | 2     |     | 35 |    | 35          |
| 1          | Tacitus, 1st half. Horace, Satires, 2d half.....   | Burchell, Olcott.. | 3            | 9        |    |       |    |        |    |         |     |       |     | 9  |    | 9           |
| 2          | Catullus, 1st half. The Letters of Cicero, 2d half.....  | McCrea.....        | 2            | 48       |    | 1     |    |        |    |         |     |       |     | 49 |    | 49          |
| 3          | Juvenal.....   | Egbert.....        | 3            | 8        |    |       |    |        |    |         |     | 1     |     | 9  |    | 9           |
| 4          | The Andria and Phormio of Terence; the Amphitruo and Mostellaria of Plautus.....                         | McCrea.....        | 2            | 11       |    | 1     |    |        |    |         |     | 1     |     | 13 |    | 13          |
| 5          | Roman Epigraphy.....   | Egbert.....        | 2            | 2        | 1  | 3     | 3  |        |    |         |     |       |     | 5  | 4  | 9           |
| 6          | Rapid Reading (Horace).....  | Peck.....          | 2            | 2        |    | 1     |    | 1      |    |         |     |       |     | 5  |    | 5           |
| 12         | Roman Epigraphy (Advanced Course).....   | Egbert.....        | 2            |          |    |       |    | 1      | 2  |         |     |       |     | 1  | 2  | 3           |
| 15         | Sources of Roman History.....  | Egbert.....        | 2            |          | 3  | 5     | 3  | 2      |    |         |     |       |     | 6  | 7  | 13          |
| 16         | Lucretius.....   | McCrea.....        | 2            | 1        |    |       | 7  | 4      | 4  |         |     |       |     | 5  | 11 | 16          |
| 21         | Roman Numismatics.....   | Olcott.....        | 1            |          | 2  |       |    |        |    |         |     |       |     |    | 2  | 2           |
| 22         | Advanced Prose Composition.....  | McCrea.....        | 2            | 2        |    | 3     | 6  | 1      | 1  |         |     | 2     |     | 6  | 9  | 15          |
| 23         | The Cena Trimalchionis of Petronius.....   | Peck.....          | 2            |          |    | 2     |    |        |    |         |     |       |     | 5  |    | 5           |
| 26         | Seminar, 1st half.....   | Peck.....          | 1            |          |    |       |    | 3      | 3  |         |     |       |     | 3  | 3  | 6           |
| 27         | Latin Literature.....  | Peck.....          | 2            | 6        | 1  |       | 2  |        |    |         |     |       |     | 6  | 3  | 9           |
| 31         | Latin Bibliography.....  | Peck.....          | 2            |          |    |       | 2  | 5      | 1  | 1       |     |       |     | 3  | 6  | 9           |
| 32         | The Topography and Monuments of Ancient Rome.....  | Olcott.....        | 2            |          |    |       | 2  |        |    |         |     | 1     |     | 1  | 2  | 3           |
| 34         | Greek and Latin Syntax.....  | Lodge.....         | 2            |          |    |       | 2  | 1      |    |         |     |       |     | 2  | 1  | 3           |
| Total..... |  |                    | 205          | 4        | 18 | 31    | 17 | 13     | 14 | 2       | 254 | 50    | 304 |    |    |             |

# DEPARTMENT OF MATERIA MEDICA AND THERAPEUTICS

| No.        | Title of Course           | Instructor            | Hours a Week | Students |         |             |
|------------|---------------------------|-----------------------|--------------|----------|---------|-------------|
|            |                           |                       |              | M.D.     | Special | Grand Total |
| 1          | Didactic Course.....      | Peabody.....          | 3            | 341      | 4       | 345         |
| 2          | Clinical Instruction..... | Peabody and Ball..... | 1            | 135      | .....   | 135         |
| Total..... |                           |                       |              | 476      | 4       | 480         |

## DEPARTMENT OF MATHEMATICS

| No.        | Title of Course  | Instructor                       | Hrs. | Students |       |       |       |       |       |       |       |             |            |       |       |       |       |                |     |    |
|------------|--|----------------------------------|------|----------|-------|-------|-------|-------|-------|-------|-------|-------------|------------|-------|-------|-------|-------|----------------|-----|----|
|            |  |                                  |      | A.B.     | A.M.  |       | Ph.D. |       | M.E.  | C.E.  | E.E.  | Mech.<br>E. | Met.<br>E. | Chem. | Spec. | Total |       | Grand<br>Total |     |    |
|            |  |                                  |      |          | M.    | W.    | M.    | W.    |       |       |       |             |            |       |       | M.    | W.    |                |     |    |
|            |  |                                  |      |          |       |       |       |       |       |       |       |             |            |       |       |       |       |                |     |    |
| A          | Solid Geometry and Algebra.  | MacLay, Keyser,<br>Mitchell..... | 3    | 92       | ..... | ..... | ..... | ..... | ..... | ..... | ..... | .....       | .....      | ..... | ..... | ..... | 4     | 96             | 96  |    |
| 1          | Trigonometry, 1st half.....  | Fiske.....                       | 3    | 22       | ..... | ..... | ..... | ..... | ..... | ..... | ..... | .....       | .....      | ..... | ..... | ..... | ..... | 3              | 25  | 25 |
| 2          | Determinants and Theory of<br>Equations, 2d half.....                          | Van Amringe,<br>Fiske.....       | 3    | 21       | ..... | ..... | ..... | ..... | ..... | ..... | ..... | .....       | .....      | ..... | ..... | ..... | ..... | 1              | 22  | 22 |
| 3          | Trigonometry, Algebra, 1st<br>half.....  | MacLay, Keyser,<br>Mitchell..... | 5    | 7        | ..... | ..... | ..... | ..... | ..... | 42    | 26    | 37          | 28         | 4     | 11    | 1     | 156   | .....          | 156 |    |
| 4          | Analytical Geometry, 2d half   | MacLay, Keyser,<br>Mitchell..... | 5    | 6        | ..... | ..... | ..... | ..... | ..... | 41    | 26    | 35          | 33         | 2     | 10    | 1     | 154   | .....          | 154 |    |
| 5          | Analytical Geometry, 1st half  | Van Amringe.....                 | 3    | 9        | 1     | ..... | ..... | ..... | ..... | ..... | ..... | .....       | .....      | ..... | ..... | ..... | ..... | 10             | 10  |    |
| 6          | Calculus.....  | Van Amringe.....                 | 3    | 7        | ..... | ..... | ..... | ..... | ..... | 36    | 23    | 23          | 22         | 1     | 17    | 1     | 130   | .....          | 130 |    |
| 7          | Differential Equations.....  | Mitchell.....                    | 3    | 3        | 3     | ..... | ..... | ..... | ..... | 1     | 1     | .....       | .....      | ..... | ..... | ..... | ..... | 7              | 1   |    |
| 103        | Riemann's Theory of Func-<br>tions.....  | Cole.....                        | 3    | .....    | 4     | 2     | 2     | 2     | ..... | ..... | ..... | .....       | .....      | ..... | ..... | ..... | ..... | 6              | 4   |    |
| 104        | Analytical Theory of Curves<br>of Double Curvature and<br>Curved Surfaces..... | MacLay.....                      | 3    | .....    | ..... | 2     | 2     | 2     | ..... | ..... | ..... | .....       | .....      | ..... | ..... | ..... | ..... | 2              | 4   |    |
| 105        | Theory of Abelian Functions  | Fiske.....                       | 3    | .....    | ..... | ..... | 1     | 2     | ..... | ..... | ..... | .....       | .....      | ..... | ..... | ..... | ..... | 1              | 2   |    |
| 107        | Modern Theories of Geometry  | Keyser.....                      | 3    | .....    | 2     | 1     | 1     | ..... | ..... | ..... | ..... | .....       | .....      | ..... | ..... | ..... | ..... | 3              | 1   |    |
| Total..... |  |                                  |      | 167      | 10    | 5     | 7     | 7     | 7     | 119   | 75    | 95          | 83         | 7     | 38    | 11    | 612   | 12             | 624 |    |

## DEPARTMENT OF MECHANICAL ENGINEERING

| No.        | Title of Course                             | Instructor              | Hours a Week | Students |       |        |       |       |       |          |         |       |         | Grand Total |
|------------|---|-------------------------|--------------|----------|-------|--------|-------|-------|-------|----------|---------|-------|---------|-------------|
|            |   |                         |              | A. B.    | A. M. | Ph. D. | M. E. | C. E. | E. E. | Mech. E. | Met. E. | Chem. | Special |             |
| 1          | Mechanical Drawing.....                     | Mayer, Miller..         | 4½           | 15       | ..... | .....  | 37    | 25    | 39    | 24       | 3       | 9     | 1       | 153         |
| 2          | Engineering Drawing.....                    | Mayer, Miller..         | 4½           | 3        | ..... | .....  | 36    | 38    | 39    | 43       | 1       | 1     | 2       | 103         |
| 3          | Shop Work.....                              | Weick.....              | 6            | 2        | ..... | .....  | 7     | 28    | 43    | 26       | .....   | ..... | 1       | 107         |
| 4          | Shop Work.....                              | Weick.....              | 6            | 3        | ..... | .....  | ..... | 24    | 31    | 26       | .....   | ..... | 2       | 86          |
| 5          | Shop Work, Summer Work.....                 | Weick.....              | (100)        | .....    | ..... | .....  | ..... | ..... | ..... | 27       | .....   | ..... | .....   | 27          |
| 6          | Shop Work, 1st half.....                    | Stieffel.....           | 6            | 2        | ..... | .....  | 47    | 39    | 51    | 51       | 12      | ..... | 3       | 142         |
| 7          | Shop Work, 2d half.....                     | Benns.....              | 6            | 2        | ..... | .....  | 21    | 15    | 23    | 23       | .....   | ..... | 2       | 63          |
| 8          | Shop Work, Summer Work.....                 | Benns.....              | (100)        | 1        | ..... | .....  | ..... | ..... | ..... | 14       | .....   | ..... | .....   | 15          |
| 9          | Shop Work, 1st half.....                    | Benns.....              | 4            | .....    | ..... | .....  | ..... | ..... | ..... | 25       | .....   | ..... | .....   | 25          |
| 10         | Properties of Materials.....                | Woolson.....            | 2            | 2        | ..... | .....  | ..... | 43    | 45    | 45       | .....   | ..... | 4       | 94          |
| 11         | Engineering of Power Plants.....            | Hutton.....             | 1            | 2        | ..... | .....  | 20    | 11    | 20    | 27       | .....   | 5     | 3       | 88          |
| 12         | Engines and Boilers.....                    | Hutton.....             | 2            | .....    | ..... | 1      | 18    | 20    | 27    | 20       | .....   | 10    | 6       | 102         |
| 13         | Engines and Boilers.....                    | Hutton.....             | 2            | .....    | ..... | 2      | 19    | 18    | 24    | 20       | .....   | 10    | 2       | 95          |
| 17         | Mechanical Engineering Laboratory.....      | Cathcart and Pendleton. | .....        | .....    | 1     | 1      | 2     | ..... | 26    | 42       | .....   | ..... | 2       | 74          |
| 18         | Machinery and Mechanism.....                | Woolson.....            | 2            | .....    | ..... | .....  | ..... | ..... | 26    | 42       | .....   | ..... | 2       | 72          |
| 19         | Heat and Heat Engines, 1st half.....        | Hutton.....             | 3            | .....    | ..... | 1      | 13    | 19    | 25    | 16       | .....   | ..... | 5       | 79          |
| 20         | Dynamics and Motors, 2d half.....           | Hutton.....             | 1            | .....    | ..... | 1      | 19    | 20    | 25    | 18       | .....   | ..... | 2       | 85          |
| 21         | Dynamics and Motors, 2d half.....           | Hutton.....             | 1            | .....    | ..... | 1      | 19    | 20    | 25    | 18       | .....   | ..... | 2       | 85          |
| 22         | Graphic Statics.....                        | Cathcart.....           | 5            | .....    | ..... | .....  | ..... | ..... | 1     | 31       | .....   | ..... | 1       | 33          |
| 23         | Valve Gearing.....                          | Cathcart.....           | 5            | .....    | ..... | .....  | ..... | ..... | 1     | 31       | .....   | ..... | 1       | 33          |
| 24         | Heat and Steam Engineering Laboratory.....  | Cathcart.....           | .....        | .....    | ..... | .....  | ..... | ..... | ..... | 2        | .....   | ..... | .....   | 3           |
| 26         | Railway Motive Power, 1st half.....         | Woolson.....            | 1½           | .....    | ..... | .....  | 21    | ..... | ..... | .....    | .....   | ..... | 1       | 22          |
| 28         | Steam Engine Design.....                    | Cathcart.....           | 2            | .....    | ..... | .....  | ..... | 1     | 38    | .....    | .....   | ..... | 1       | 40          |
| 29         | Factory Organization.....                   | Hutton.....             | 1            | .....    | ..... | 1      | ..... | ..... | 22    | 22       | .....   | ..... | 2       | 25          |
| 30         | Work Shop Economics.....                    | Hutton.....             | 1            | .....    | ..... | 1      | ..... | ..... | ..... | 24       | .....   | ..... | 2       | 27          |
| 36         | Summer Work (between 1st and 2d Years)..... | .....                   | .....        | .....    | ..... | .....  | ..... | ..... | ..... | 30       | .....   | ..... | .....   | 30          |
| 37         | Summer Work (between 2d and 3d Years).....  | .....                   | .....        | 1        | ..... | .....  | ..... | ..... | ..... | 25       | .....   | ..... | .....   | 26          |
| 38         | Summer Work (between 3d and 4th Years)..... | .....                   | .....        | .....    | ..... | .....  | ..... | ..... | ..... | 24       | .....   | ..... | .....   | 24          |
| 41         | Machine Design.....                         | Cathcart.....           | 5            | .....    | ..... | .....  | 4     | ..... | ..... | 20       | .....   | ..... | .....   | 24          |
| 43-45      | Locomotive Engineering, 1st half.....       | Hutton.....             | 3            | .....    | 1     | 1      | ..... | ..... | ..... | 21       | .....   | ..... | 1       | 24          |
| 46-48      | Locomotive Engineering, 2d half.....        | Hutton.....             | 2            | .....    | 1     | 1      | ..... | ..... | ..... | 21       | .....   | ..... | 1       | 24          |
| Total..... |   |                         |              | 33       | 3     | 11     | 196   | 312   | 450   | 796      | 4       | 35    | 50      | 1890        |

## DEPARTMENT OF MECHANICS

| No.        | Title of Course                                     | Instructor      | Hours a Week | Students |      |     |       |     |      |      |      |          |         |             |       |     |     | Grand Total |
|------------|---|-----------------|--------------|----------|------|-----|-------|-----|------|------|------|----------|---------|-------------|-------|-----|-----|-------------|
|            |   |                 |              | A.B.     | A.M. |     | Ph.D. |     | M.E. | C.E. | E.E. | Mech. E. | Met. E. | Chem. Spec. | Total |     |     |             |
|            |   |                 |              |          | M.   | W.  | M.    | W.  |      |      |      |          |         |             | M.    | W.  |     |             |
|            |   |                 |              |          |      |     |       |     |      |      |      |          |         |             |       |     |     |             |
| 1          | Analytical Mechanics.....                           | R. S. Woodward. | 3            | 3        | 1    | ... | 2     | ... | 22   | 14   | 24   | 22       | 1       | .....       | 2     | 91  | ... | 91          |
| 2          | Elementary Mechanics.....                           | Pfister.....    | 2            | 2        | ...  | ... | ...   | ... | ...  | ...  | ...  | ...      | ...     | ...         | ...   | 2   | ... | 2           |
| 3          | Theoretical Mechanics.....                          | Pfister.....    | 2            | ...      | 1    | 3   | 1     | ... | ...  | ...  | ...  | ...      | ...     | ...         | ...   | 2   | 3   | 5           |
| 4          | Thermo-dynamics.....                                | Pupin.....      | 3            | ...      | ...  | ... | ...   | ... | ...  | 23   | 24   | 17       | ...     | ...         | ...   | 64  | ... | 64          |
| 5          | Theory of Dynamo and Motor.....                     | Pupin, Townsend | 3            | ...      | ...  | ... | ...   | ... | ...  | ...  | ...  | ...      | ...     | ...         | ...   | ... | ... | 24          |
| 6          | Theory of Dynamo and Motor.....                     | Pupin.....      | 3            | ...      | ...  | ... | ...   | ... | ...  | ...  | 26   | 1        | ...     | ...         | ...   | 27  | ... | 27          |
| 7          | Theory of Alternator and Transformer, 1st half..... | Pupin.....      | 3            | ...      | 2    | ... | ...   | ... | ...  | ...  | 24   | ...      | ...     | ...         | ...   | 26  | ... | 26          |
| 8          | Theory of Variable Currents, 2d half.....           | Pupin.....      | 2            | ...      | 1    | ... | ...   | ... | ...  | ...  | 24   | ...      | ...     | ...         | ...   | 25  | ... | 25          |
| 9          | Advanced Theoretical Mechanics.....                 | Woodward.....   | 2            | ...      | 1    | ... | 2     | ... | ...  | ...  | ...  | ...      | ...     | ...         | ...   | 3   | ... | 3           |
| 10         | Theory of Potential Function.....                   | Woodward.....   | 2            | ...      | 6    | 2   | 4     | 1   | ...  | ...  | ...  | ...      | ...     | ...         | ...   | 10  | 3   | 13          |
| 11         | Electricity and Magnetism.....                      | Pupin.....      | 2            | ...      | 1    | ... | 1     | ... | ...  | ...  | ...  | ...      | ...     | ...         | ...   | 2   | ... | 2           |
| 12         | Electro-magnetic Theory of Light.....               | Pupin.....      | 2            | ...      | 2    | ... | ...   | ... | ...  | ...  | ...  | ...      | ...     | ...         | ...   | 3   | ... | 3           |
| 13         | Analytical Mechanics.....                           | Pfister.....    | 2            | ...      | ...  | ... | ...   | ... | 1    | ...  | ...  | ...      | ...     | 8           | ...   | 9   | ... | 9           |
| 14         | Thermo-dynamics.....                                | Pfister.....    | 2            | ...      | ...  | ... | ...   | ... | 14   | ...  | ...  | ...      | ...     | ...         | 1     | 15  | ... | 15          |
| Total..... |   |                 |              | 5        | 15   | 5   | 11    | 1   | 37   | 37   | 145  | 41       | 1       | 8           | 3     | 303 | 6   | 309         |



## DEPARTMENT OF METALLURGY

| No.        | Title of Course  | Instructor            | Hours<br>a Week     | Students |       |       |       |       |             |            |       |       |    | Grand<br>Total |
|------------|--|-----------------------|---------------------|----------|-------|-------|-------|-------|-------------|------------|-------|-------|----|----------------|
|            |  |                       |                     | A.M.     | Ph.D. | M.E.  | C.E.  | E.E.  | Mech.<br>E. | Met.<br>E. | Chem. | Spec. |    |                |
| 1          | General Metallurgy, 3 months.....                              | Bentley.....          | 3                   | 3        | 4     | 30    | ..... | ..... | .....       | .....      | 2     | 5     | 5  | 49             |
| 2          | Metallurgy of Steel and Iron, 1<br>month.....                  | Howe.....             | 3                   | 2        | 6     | 30    | ..... | ..... | .....       | .....      | 2     | 5     | 3  | 48             |
| 3          | Metallurgy of Iron and Steel, 2d<br>half.....                  | Howe.....             | 3                   | 4        | 6     | 1     | 18    | 24    | 20          | 3          | 4     | 2     | 82 |                |
| 4          | Metallurgy of Copper, 3 months....                             | Howe.....             | 3                   | 1        | 4     | 18    | 1     | ..... | .....       | 2          | 10    | 7     | 43 |                |
| 5          | Metallurgy of the other Non-fer-<br>rous Metals, 5 months..... | Bentley.....          | 3                   | 1        | 6     | 20    | ..... | ..... | .....       | .....      | 5     | 7     | 39 |                |
| 6          | Practical Laboratory Work, 2d half                             | Howe, Bentley, Clarke | 3                   | 1        | 2     | ..... | ..... | ..... | .....       | 1          | ..... | ..... | 4  |                |
| 6A         | Laboratory, 1 month, 1st half.....                             | Howe, Bentley, Clarke | 10 after-<br>noons. | 2        | 1     | ..... | ..... | ..... | .....       | 1          | ..... | 2     | 6  |                |
| 7          | Advanced Course in Calorimetry....                             | Howe.....             | Res'h....           | 1        | ..... | ..... | ..... | ..... | .....       | .....      | ..... | ..... | 1  |                |
| 8          | Advanced Course in Pyrometry....                               | Howe.....             | Res'h....           | 1        | 2     | ..... | ..... | ..... | .....       | .....      | ..... | ..... | 3  |                |
| 9          | Microscopic Study of Iron, Steel,<br>and other Metals.....     | Howe, Bentley.....    | Res'h....           | 2        | 1     | ..... | ..... | ..... | .....       | .....      | ..... | ..... | 3  |                |
| Total..... |  |                       | 18                  | 32       | 99    | 19    | 24    | 20    | 11          | 29         | 26    | 278   |    |                |

DEPARTMENT OF MINERALOGY

| No.   | Title of Course                           | Instructor             | Hours<br>a Week | Students |       |       |       |       |            |       |       |                |
|-------|---|------------------------|-----------------|----------|-------|-------|-------|-------|------------|-------|-------|----------------|
|       |   |                        |                 | A.B.     | A.M.  | Ph.D. | M.E.  | C.E.  | Met.<br>E. | Chem. | Spec. | Grand<br>Total |
| 1     | Blowpipe Analyses, 1st half               | Moses, Luquer, McCord. | 3               | 2        | ..... | ..... | 37    | ..... | 3          | 11    | 9     | 62             |
| 2     | Crystallography, 1st half                 | Moses                  | 2               | 2        | ..... | ..... | 39    | ..... | 3          | 11    | 6     | 61             |
| 4     | Descriptive Mineralogy, 1st Year, 2d half | Moses, Luquer          | 3½              | 1        | 1     | 1     | 47    | ..... | 3          | 9     | 3     | 65             |
| 4a    | Descriptive Mineralogy, 2d Year, 1st half | Moses, Luquer          | 3½              | .....    | ..... | 1     | 32    | ..... | 3          | 16    | 5     | 57             |
| 5     | Minerals of Building Stones               | Luquer, McCord         | 2               | 1        | ..... | ..... | 26    | ..... | .....      | ..... | ..... | 27             |
| 6     | Optical Mineralogy, 6 weeks               | Luquer                 | 2               | .....    | ..... | 2     | 33    | ..... | 2          | ..... | 1     | 38             |
| 7     | Optical Mineralogy                        | Luquer                 | 6               | .....    | 1     | ..... | ..... | ..... | .....      | ..... | ..... | 1              |
| 8     | Physical Crystallography, 2d half         | Moses                  | 1½              | .....    | ..... | ..... | ..... | ..... | .....      | 2     | ..... | 2              |
| 9     | Physical Crystallography                  | Moses                  | 6               | .....    | ..... | 3     | ..... | ..... | .....      | ..... | ..... | 3              |
| 10    | Physical Crystallography                  | Moses                  | 6               | .....    | ..... | 1     | ..... | ..... | .....      | ..... | ..... | 1              |
| Total |   |                        |                 | 6        | 2     | 8     | 188   | 26    | 14         | 49    | 24    | 317            |

## DEPARTMENT OF MINING

| No.        | Title of Course                           | Instructor          | Hours a Week | Students |       |       |       |         |         | Grand Total |
|------------|---|---------------------|--------------|----------|-------|-------|-------|---------|---------|-------------|
|            |   |                     |              | A. M.    | Ph.D. | M. E. | C. E. | Met. E. | Special |             |
| 1          | Excavation and Tunnelling (1st half)..... | Peele.....          | 3            | 1        | ..... | 36    | ..... | .....   | .....   | 37          |
| 2          | Boring and Shaft Sinking (2d half).....   | Peele.....          | 2            | .....    | ..... | 33    | ..... | .....   | .....   | 33          |
| 2b         | Earth and Rock Excavation (2d half).....  | Peele.....          | 2            | .....    | ..... | 15    | ..... | .....   | 1       | 16          |
| 3          | Mining.....                               | Munroe.....         | 2            | 2        | 1     | 32    | 1     | 2       | 2       | 40          |
| 4          | Ore Dressing.....                         | Munroe.....         | 2            | 2        | 1     | 29    | 1     | 1       | 2       | 36          |
| 5          | Ore Dressing Laboratory (3 weeks), Afts.. | Munroe, Hooper..... | 2            | 1        | 2     | 24    | ..... | .....   | .....   | 29          |
| 6          | Mine Engineering.....                     | Munroe.....         | 2            | 1        | ..... | 20    | 1     | .....   | 3       | 25          |
| 7          | Mine Plant.....                           | Peele.....          | 2½           | 1        | ..... | 19    | ..... | .....   | 4       | 24          |
| 7a         | Mine Constructions (2d half).....         | Peele.....          | 1            | .....    | ..... | 21    | ..... | 3       | .....   | 24          |
| 8          | Design of Mine Plant.....                 | Peele, Hooper.....  | 6            | .....    | ..... | 20    | ..... | .....   | .....   | 21          |
| 9          | Mine Surveying (2d half).....             | Munroe.....         | 1            | .....    | ..... | 23    | ..... | .....   | 1       | 24          |
| 10         | Mine Administration (2d half).....        | Munroe.....         | 1            | .....    | ..... | 21    | ..... | 1       | 3       | 25          |
| 11         | Summer School in Mining (6 weeks).....    | Peele.....          | .....        | .....    | ..... | 29    | ..... | .....   | .....   | 29          |
| Total..... |   |                     |              | 8        | 4     | 307   | 18    | 7       | 19      | 363         |

## DEPARTMENT OF MUNICIPAL OR PRIVATE LAW

| No.        | Title of Course                                | Instructor             | Hours a Week | Students |       |         |             |
|------------|--|------------------------|--------------|----------|-------|---------|-------------|
|            |  |                        |              | A.B.     | LL.B. | Special | Grand Total |
| 1          | Elements of Jurisprudence and Equity I.....    | Keener.....            | 2            | 90       | 172   | .....   | 192         |
| 2          | Contracts.....                                 | Terry.....             | 4            | 20       | 173   | 1       | 194         |
| 3          | Real and Personal Property I.....              | Kirchwey.....          | 2            | 20       | 171   | .....   | 191         |
| 4          | Torts.....                                     | Burdick.....           | 2            | 20       | 171   | .....   | 191         |
| 4a         | Criminal Law.....                              | Houston.....           | 2            | 20       | 171   | .....   | 191         |
| 5          | Common Law Pleading, 2d half.....              | Stone.....             | 2            | 20       | 173   | 1       | 194         |
| 6          | Domestic Relations, 1st half.....              | Houston.....           | 2            | 20       | 171   | .....   | 191         |
| 7          | Quasi Contracts.....                           | Kirchwey.....          | 2            | .....    | 140   | .....   | 140         |
| 8          | Equity II.....                                 | Keener.....            | 2            | .....    | 142   | .....   | 142         |
| 9          | Real and Personal Property II.....             | Kirchwey.....          | 2            | .....    | 141   | .....   | 141         |
| 10         | Agency.....                                    | Canfield.....          | 2            | .....    | 138   | .....   | 138         |
| 11         | Bailments and Carriers.....                    | Houston.....           | 2            | .....    | 138   | .....   | 138         |
| 12         | Sales of Personal Property.....                | Burdick.....           | 2            | .....    | 141   | .....   | 141         |
| 14         | Equity Pleading and Practice, 1st half.....    | Stone.....             | 2            | .....    | 41    | .....   | 41          |
| 15         | Negotiable Paper.....                          | Burdick.....           | 2            | .....    | 140   | .....   | 140         |
| 16         | Code Pleading and Practice.....                | Stone.....             | 2            | .....    | 48    | .....   | 48          |
| 17         | Corporations.....                              | Keener.....            | 2            | .....    | 98    | .....   | 98          |
| 18         | Equity III.....                                | Keener.....            | 2            | .....    | 96    | .....   | 96          |
| 19         | Evidence.....                                  | Canfield.....          | 2            | .....    | 100   | .....   | 100         |
| 20         | Insurance, 2d half.....                        | Stone.....             | 2            | .....    | 72    | .....   | 72          |
| 21         | Partnership.....                               | Burdick.....           | 2            | .....    | 96    | .....   | 96          |
| 22         | Real and Personal Property III.....            | Kirchwey.....          | 2            | .....    | 90    | .....   | 90          |
| 23         | Suretyship and Mortgage.....                   | Burdick, Kirchwey..... | 2            | .....    | 99    | .....   | 99          |
| 24         | Wills and Administration.....                  | Houston.....           | 2            | .....    | 87    | .....   | 87          |
| 25         | Doctrines Peculiar to N. Y. Law, 1st half..... | Canfield.....          | 2            | .....    | 30    | .....   | 30          |
| 26         | Bankruptcy, 1st half.....                      | Houston.....           | 2            | .....    | 37    | .....   | 37          |
| 27         | Office Practice, 2d half.....                  | Houston.....           | 2            | .....    | 45    | .....   | 45          |
| Total..... |  |                        | .....        | 140      | 3121  | 2       | 3263        |

## DEPARTMENT OF MUSIC

| No.         | Title of Course               | Instructor  | Hours a Week | Students |      |      |      |       |          |       |         |    |      |       | Grand Total |     |
|-------------|-------------------------------|-------------|--------------|----------|------|------|------|-------|----------|-------|---------|----|------|-------|-------------|-----|
|             |                               |             |              | A.B.     |      | A.M. |      | Ph.D. | Mech. E. | Chem. | Special |    | And. | Total |             |     |
|             |                               |             |              | M.       | W.   | M.   | W.   |       |          |       | M.      | W. |      | M.    |             | W.  |
|             |                               |             |              |          |      |      |      |       |          |       |         |    |      |       |             |     |
| 1           | General Course.....           | MacDowell.. | 1            | 7        | 10   | 4    | 1    | 1     | .....    | 1*    | 4       | 18 | 6    | 17    | 35          | 52  |
| 2           | General Course.....           | MacDowell.. | 1            | 3        | .... | 1    | 1    | ..... | .....    | ..... | 3       | 5  | .... | 7     | 6           | 13  |
| 3           | Harmony.....                  | McWhood...  | 2            | 4        | 9    | 2    | 1    | 2     | 1*       | 1*    | 3       | 13 | .... | 13    | 23          | 36  |
| 4           | Counterpoint.....             | MacDowell.. | 2            | 2        | .... | .... | .... | ....  | .....    | ..... | 4       | 8  | 1    | 7     | 8           | 15  |
| 6           | Musical Dictation.....        | McWhood...  | 1            | 5        | 6    | .... | .... | ....  | 1*       | ..... | 4       | 9  | 3    | 10    | 18          | 28  |
| 7           | Musical Seminar.....          | MacDowell.. | 1            | 3        | .... | .... | 1    | 1     | .....    | ..... | 3       | 1  | .... | 7     | 2           | 9   |
| 10          | Musical Dictation, Advanced.. | McWhood...  | 1            | 2        | .... | 1    | .... | ....  | .....    | ..... | ....    | 6  | .... | 3     | 6           | 9   |
| 11          | Free Composition, Advanced..  | MacDowell.. | 1            | 1        | .... | .... | .... | ....  | .....    | ..... | 1       | 2  | .... | 2     | 2           | 4   |
| Total ..... |                               |             | .....        | 27       | 25   | 8    | 4    | 4     | 2        | 2     | 23      | 62 | 10   | 66    | 100         | 166 |

\* These students elected Music as an optional study.

## DEPARTMENT OF NEUROLOGY

| No.        | Title of Course                                    | Instructor            | Hours a Week | Students |         |             |
|------------|--|-----------------------|--------------|----------|---------|-------------|
|            |  |                       |              | M.D.     | Special | Grand Total |
|            |  |                       |              |          |         |             |
| 1          | Diseases of the Mind and Nervous System.....       | Starr (5 months)..... | 1            | 298      | 2       | 300         |
| 2          | Clinical Lectures at the Vanderbilt Clinic.....    | Starr.....            | 1            | 147      | .....   | 147         |
| 3          | Practical Instruction in Neurology (Sections)..... | Peterson.....         | (12 hrs)     | 147      | .....   | 147         |
| 4          | Insanity (4 clinics).....                          | Peterson.....         | (6 hrs)      | 147      | .....   | 147         |
| Total..... |  |                       |              | 739      | 2       | 741         |

## DEPARTMENT OF OBSTETRICS

| No.        | Title of Course  | Instructor   | Hours a Week | Students |         |             |
|------------|--|--|--------------|----------|---------|-------------|
|            |  |  |              | M.D.     | Special | Grand Total |
| 1          | Theory and Practice of Obstetrics.....<br>Recitations and Demonstrations.....<br>Practical Instruction at the Sloane Maternity Hospital..... | Cragin (Oct. to Mar.)...<br>Voorhees.....<br>Dorman..... | 3            | 151      | 1       | 152         |
| 2          |  |  | 1            | 188      | .....   | 188         |
| 3          |  |  | .....        | 147      | .....   | 147         |
| Total..... |  |  |              | 486      | 1       | 487         |

## DEPARTMENT OF OPHTHALMOLOGY

| No.   | Title of Course   | Instructor | Hours a Week | Students |             |     |
|-------|---|------------|--------------|----------|-------------|-----|
|       |   |            |              | M.D.     | Grand Total |     |
| 1     | Clinical Lectures upon the Diseases of the Eye.<br>2 Practical Instruction in the Use of the Ophthalmoscope.<br>3 Practical Instruction in the Refraction and Motility of the Eye.<br>4 Hospital Clinics on the Diseases and the Operative Surgery of the Eye at the New York Ophthalmic and Aural Institute. | Knapp      | 1            | 151      | 151         |     |
|       |   | May        |              | 151      | 151         |     |
|       |   | Chalborne  |              | 151      | 151         | 151 |
|       |   | Knapp      | 1½           | 115      | 151         | 151 |
| Total |   |            |              | 604      | 604         |     |

## DEPARTMENT OF ORTHOPÆDIC SURGERY

| No.        | Title of Course                                  | Instructor           | Hours a Week | Lessons each Student | Students |       |
|------------|--|----------------------|--------------|----------------------|----------|-------|
|            |  |                      |              |                      | M.D.     | Total |
| 1          | Clinical Lectures.....                           | Gibney.....          | 1            | .....                | 147      | 147   |
| 2          | Practical Instruction (sections of 20).....      | Whitman.....         | .....        | 10                   | 147      | 147   |
| 3          | Clinics, Hospital for Ruptured and Crippled..... | Gibney, Whitman..... | 1            | .....                | 7        | 7     |
| Total..... |  |                      |              |                      | 294 +    | 294 + |

## DEPARTMENT OF OTOTOLOGY

| No.        | Title of Course   | Instructor              | Hours a Week | Students |             |
|------------|---|-------------------------|--------------|----------|-------------|
|            |   |                         |              | M.D.     | Grand Total |
| 1          | Practical Instruction in the Diagnosis and Treatment of the Diseases of the Ear at the Vanderbilt Clinic..... | Buck, Cowen, Lewis..... | .....        | 151      | 151         |
| Total..... |   |                         |              | 151      | 151         |

## DEPARTMENT OF PATHOLOGY

| No.                             | Title of Course  | Instructor  | Hours a Week           | Students   |       |         |             |
|---------------------------------|--|---|------------------------|------------|-------|---------|-------------|
|                                 |  |   |                        | A.B. Ph.D. | M.D.  | Special | Grand Total |
| <b>A.—PATHOLOGY</b>             |  |   |                        |            |       |         |             |
| 1                               | Autopsy Technique and Pathological Anatomy.....  | Hodenpyl, Thacher, Biggs, Wood.....                     | 8 wks.<br>1            | .....      | 183   | .....   | 183         |
| 2                               | Practical Instruction in General Pathology, Pathological Anatomy and Histology, and in the Bacteriology of the Infectious Diseases ..... | Prudden, Hodenpyl, Larkin, Bailey, Lartigau.....        | $\frac{1}{2}$ yr.<br>6 | .....      | 151   | 1       | 152         |
| 3                               | Demonstrations in Pathological Anatomy.....  | Hodenpyl, Larkin.....                                   | 2                      | .....      | 151   | .....   | 151         |
| 4                               | Pathological Anatomy and Histology, Experimental Pathology, Bacteriology as Applied to Medicine, and Clinical Microscopy.....            | Prudden, Freeborn, Hodenpyl, Wood, Hiss, Lartigau.....  | .....                  | .....      | ..... | 1       | 1           |
| Total (Pathology).....          |  |   |                        | .....      | 485   | 2       | 487         |
| <b>B.—NORMAL HISTOLOGY</b>      |  |   |                        |            |       |         |             |
| 1                               | Practical Instruction in General Normal Histology ..   | Freeborn, Bailey, Crampton, Wilcox, Banker.....         | $\frac{1}{2}$ yr.<br>6 | 6          | 225   | 1       | 232         |
| 2                               | Practical Instruction similar in Character and Method to that under 1.....   | Freeborn, Bailey, Strong, Wilcox, Crampton, Banker..... | $\frac{1}{2}$ yr.<br>4 | .....      | 183   | .....   | 183         |
| Total (Normal Histology).....   |  |   |                        | 6          | 408   | 1       | 415         |
| <b>C.—BACTERIOLOGY</b>          |  |   |                        |            |       |         |             |
| 1                               | Practical Instruction in Bacteriology.....   | Hiss, Neumann, Wadsworth.....                           | $\frac{1}{2}$ yr.<br>6 | .....      | 181   | .....   | 181         |
| 2                               | Special Laboratory Course.....   | Hiss.....   | .....                  | 1          | ..... | 1       | 2           |
| Total (Bacteriology).....       |  |   |                        | 1          | 181   | 1       | 183         |
| <b>D.—CLINICAL PATHOLOGY.</b>   |  |   |                        |            |       |         |             |
| 1                               | Practical Instruction in Clinical Pathology.....   | Wood, Evans, Jessup .....                               | $\frac{1}{2}$ yr.<br>6 | .....      | 147   | 1       | 148         |
| Total (Clinical Pathology)..... |  |   |                        | .....      | 147   | 1       | 148         |
| Departmental Total .....        |  |   |                        | 6          | 1221  | 5       | 1233        |



## DEPARTMENT OF PHILOSOPHY AND EDUCATION \*

| No.                     | Title of Course  | Instructor             | Hours<br>a Week | Students |      |      |      |       |      |       |      |      |       |      |                |
|-------------------------|--|------------------------|-----------------|----------|------|------|------|-------|------|-------|------|------|-------|------|----------------|
|                         |  |                        |                 | A.B.     |      | A.M. |      | Ph.D. |      | Spec. |      | Aud. | Total |      | Grand<br>Total |
|                         |  |                        |                 | M.       | W.   | M.   | W.   | M.    | W.   | M.    | W.   |      | M.    | W.   |                |
|                         |  |                        |                 |          |      |      |      |       |      |       |      |      |       |      |                |
| A.—PHILOSOPHY.          |  |                        |                 |          |      |      |      |       |      |       |      |      |       |      |                |
| 1                       | Historical and Critical Introduction to Philosophy.....            | Butler, Jones.....     | 3               | 15       | 25   | 9    | 1    | 10    | .... | 5     | 4    | 2    | 39    | 32   | 71             |
| 2                       | Ethics, 2d half.....   | Lord.....              | 2               | 25       | .... | .... | .... | ....  | .... | 8     | 1    | .... | 33    | 1    | 34             |
| 5                       | Practical Ethics.....  | Hyslop.....            | 3               | ....     | 6    | 5    | 1    | 3     | .... | 1     | 1    | .... | 9     | 8    | 17             |
| 8                       | Principles and Problems of Aesthetics.....                         | Jones.....             | 2               | 1        | 3    | .... | 1    | 2     | .... | 1     | .... | .... | 4     | 4    | 8              |
| 9                       | Logic and Scientific Method, 2d half.....                          | Lord.....              | 3               | 24       | .... | 1    | .... | ....  | .... | 2     | .... | .... | 27    | .... | 27             |
| 11                      | European Philosophy from the Renaissance to the Enlightenment..... | Jones.....             | 2               | ....     | .... | 1    | .... | 3     | .... | ....  | 1    | .... | 4     | 1    | 5              |
| 12                      | Practicum on Selected Topics in Modern Philosophy.....             | Butler.....            | 2               | 1        | 2    | 3    | 2    | 12    | 1    | ....  | 1    | .... | 16    | 6    | 22             |
| 13                      | Metaphysics.....   | Hyslop.....            | 2               | ....     | .... | 5    | 1    | 7     | .... | ....  | .... | .... | 12    | 1    | 13             |
| 14                      | Practicum on the Philosophy of Herbert Spencer.....                | Hyslop.....            | 2               | ....     | .... | 3    | 1    | 8     | .... | 1     | .... | .... | 12    | 1    | 13             |
|                         | Seminar.....   | Hyslop.....            | ....            | ....     | .... | 3    | .... | 4     | 1    | ....  | .... | .... | 7     | 1    | 8              |
| Total (Philosophy)..... |  |                        |                 | 66       | 36   | 30   | 7    | 49    | 2    | 18    | 8    | 2    | 163   | 55   | 218            |
| B.—EDUCATION.           |  |                        |                 |          |      |      |      |       |      |       |      |      |       |      |                |
| 1                       | History of Education.....  | Monroe.....            | 2 or 3          | 14       | 18   | 11   | 20   | 14    | 1    | 2     | .... | .... | 41    | 39   | 80             |
| 2                       | Principles of Education.....                                       | Butler, Updegraff..... | 2 or 3          | 18       | 23   | 27   | 25   | 20    | 2    | 5     | .... | 1    | 70    | 51   | 121            |
| 3                       | Applications of Psychology in Teaching.....                        | McMurry.....           | 3               | 3        | 7    | 3    | 1    | 4     | .... | 2     | .... | .... | 12    | 8    | 20             |
| 4                       | Observation and Practice in Teaching.....                          | McMurry.....           | 2               | 1        | 1    | 6    | 2    | 5     | .... | ....  | .... | .... | 12    | 3    | 15             |
| 5                       | General Method.....  | McMurry.....           | 2               | 1        | .... | 10   | 3    | 3     | .... | ....  | .... | .... | 14    | 3    | 17             |
| 6                       | School Supervision and Management.....                             | Dutton.....            | 2               | 1        | .... | 8    | 1    | 6     | .... | 1     | .... | .... | 16    | 1    | 17             |

|                         |   |                   |          |       |       |       |       |       |       |       |       |       |       |     |
|-------------------------|---|-------------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| 8                       | Secondary Education.....  | Russell Monroe..  | 2        | 6     | 12    | 10    | 16    | 9     | ..... | ..... | ..... | 25    | 28    | 53  |
| 9                       | Child Study.....  | Thorndike .....   | 2        | 2     | 1     | 1     | ..... | ..... | ..... | ..... | ..... | 3     | 1     | 4   |
| 12                      | Methods of Teaching Biology in Elementary and Secondary Schools.....          | Lloyd, Bigelow..  | 2        | ..... | 1     | ..... | 6     | 1     | ..... | ..... | ..... | 1     | 7     | 8   |
| 13                      | Methods of Teaching English in Secondary Schools.....                         | Baker.....        | 2        | 4     | 8     | 6     | 10    | 2     | ..... | 1     | ..... | 13    | 18    | 31  |
| 14                      | English in Elementary Schools.....  | Baker.....        | 3        | 1     | ..... | 1     | 3     | ..... | ..... | ..... | ..... | 2     | 3     | 5   |
| 17                      | Methods of Teaching German in Secondary Schools.....                          | Bagster-Collins.. | 2        | 2     | 1     | ..... | 1     | ..... | ..... | ..... | ..... | 2     | 2     | 4   |
| 18                      | Methods of Teaching Greek in Secondary Schools.....                           | Lodge.....        | 2        | 1     | 6     | 2     | 2     | 2     | ..... | ..... | ..... | 5     | 8     | 13  |
| 19                      | Methods of Teaching History in Secondary Schools.....                         | Castle.....       | 2        | 1     | 4     | 1     | 4     | 2     | ..... | ..... | ..... | 4     | 8     | 12  |
| 21                      | Methods of Teaching Latin in Secondary Schools.....                           | Lodge.....        | 2        | 1     | 5     | 2     | 6     | 1     | ..... | ..... | ..... | 4     | 11    | 15  |
| 22                      | Methods of Manual Training.....   | Richards.....     | 2        | ..... | 2     | 2     | ..... | ..... | ..... | ..... | ..... | 2     | ..... | 2   |
| 23                      | Methods of Teaching Mathematics in Secondary Schools.....                     | Biklé.....        | 2        | 1     | 3     | 1     | 2     | ..... | ..... | ..... | ..... | 2     | 5     | 7   |
| 24                      | Methods of Teaching Mathematics in Elementary Schools.....                    | Biklé.....        | 3        | 1     | ..... | ..... | 1     | ..... | ..... | ..... | ..... | 1     | 1     | 2   |
| 25                      | Methods of Teaching Physical Science in Elementary and Secondary Schools..... | Woodhull.....     | 2        | ..... | 1     | ..... | 2     | ..... | ..... | ..... | ..... | ..... | 3     | 3   |
| 29                      | Seminar.....  | Monroe.....       | Semim'ly | ..... | 1     | 3     | 2     | 1     | ..... | ..... | ..... | 4     | 3     | 7   |
| 30                      | Seminar.....  | Dutton.....       | 2        | ..... | ..... | 4     | 1     | 2     | ..... | ..... | ..... | 6     | 1     | 7   |
| 31                      | Practicum.....  | Russell.....      | 1        | ..... | 6     | 6     | ..... | 5     | ..... | ..... | ..... | 11    | ..... | 11  |
| 33                      | Seminar.....  | McMurry.....      | .....    | ..... | 1     | 1     | 1     | 6     | ..... | ..... | ..... | 7     | 2     | 9   |
| 41                      | Theory and Practice of Teaching Nature Study in Elementary Schools.....       | Carsa.....        | 2        | ..... | ..... | ..... | 2     | ..... | ..... | ..... | ..... | ..... | 2     | 2   |
| Total (Education).....  |   |                   | 58       | 93    | 105   | 111   | 83    | 3     | 11    | ..... | 1     | 257   | 268   | 465 |
| Departmental Total..... |   |                   | 124      | 129   | 135   | 118   | 132   | 5     | 29    | 8     | 3     | 420   | 263   | 683 |

\* This statement does not include Teachers College students who are not candidates for the degrees of A.B., A.M., or Ph.D.  
The number of such students is 612.

## DEPARTMENT OF PHYSICS

| Students   |                                   |                            |        |       |       |       |       |       |       |       |       |          |         |       |            |       |       |             |     |
|------------|-----------------------------------|----------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|----------|---------|-------|------------|-------|-------|-------------|-----|
| No.        | Title of Course                   | Instructor                 | Hours  | A.B.  | A.M.  |       | Ph.D. |       | M.E.  | C.E.  | E.E.  | Mech. E. | Met. E. | Chem. | M.D. Spec. | Total |       | Grand Total |     |
|            |                                   |                            |        |       | M.    | W.    | M.    | W.    |       |       |       |          |         |       |            | M.    | W.    |             |     |
|            |                                   |                            |        |       |       |       |       |       |       |       |       |          |         |       |            |       |       |             |     |
| 1          | General Physics...                | Rood, Gordon..             | 3      | 76    | ..... | ..... | ..... | ..... | 32    | 27    | 39    | 36       | 3       | 10    | .....      | 9     | 232   | .....       | 232 |
| 2          | Magnetism and Electricity.....    | Rood.....                  | 3 or 5 | 9     | 3     | 1     | 1     | 1     | ..... | ..... | ..... | .....    | .....   | ..... | .....      | 1     | 14    | 2           | 16  |
| 3          | Units and Measurements.....       | Hallock....                | 3 or 5 | 7     | ..... | ..... | 1     | ..... | 38    | 22    | 25    | 25       | 3       | ..... | .....      | ..... | 121   | .....       | 121 |
| 4          | Light and Heat...                 | Rood.....                  | 4      | 1     | 2     | ..... | 1     | 1     | ..... | ..... | ..... | .....    | .....   | ..... | .....      | ..... | 4     | 1           | 5   |
| 5          | Optical Apparatus.....            | Hallock....                | 1      | ..... | ..... | ..... | ..... | 1     | ..... | ..... | ..... | .....    | .....   | ..... | .....      | ..... | ..... | 1           | 1   |
| 8          | Undulatory Theory of Light....    | Hallock....                | 2      | ..... | ..... | ..... | ..... | 1     | ..... | ..... | ..... | .....    | .....   | ..... | .....      | ..... | ..... | 1           | 1   |
| 16         | Index of Refraction.....          | Hallock, Tufts....         | 3 or 4 | ..... | ..... | ..... | 1     | ..... | ..... | ..... | ..... | .....    | .....   | ..... | .....      | ..... | 1     | .....       | 1   |
| 20         | Advanced Course in Spectrometry   | Hallock, Tufts....         | 3 or 4 | ..... | ..... | ..... | 1     | ..... | ..... | ..... | ..... | .....    | .....   | ..... | .....      | ..... | 1     | .....       | 1   |
| 25         | Polarized Light...                | Hallock, Tufts....         | 3 or 4 | ..... | ..... | ..... | 1     | ..... | ..... | ..... | ..... | .....    | .....   | ..... | .....      | ..... | 1     | .....       | 1   |
|            | Research.....                     | Rood, Hallock, Tufts....   | 3 or 4 | ..... | ..... | ..... | 3     | ..... | ..... | ..... | ..... | .....    | .....   | ..... | .....      | ..... | 3     | .....       | 3   |
| 31         | General Physics, one-half year... | Hallock, Tufts, Trowbridge | 4½     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | .....    | .....   | ..... | .....      | ..... | 145   | .....       | 145 |
| Total..... |                                   |                            |        | 93    | 5     | 1     | 9     | 4     | 70    | 49    | 64    | 61       | 6       | 10    | 145        | 10    | 522   | 5           | 537 |

## DEPARTMENT OF PHYSIOLOGICAL CHEMISTRY

| No.         | Title of Course                        | Instructor             | Hours a Week | Students |       |       |         | Grand Total |
|-------------|--|------------------------|--------------|----------|-------|-------|---------|-------------|
|             |  |                        |              | A.M.     | Ph.D. | M.D.  | Special |             |
| 1           | Physiological Chemistry, General ..... | Chittenden, Gies ..... | 8            | 1        | 1     | 211   | 2       | 215         |
| 2           | Advanced Physiological Chemistry ..... | Gies, Cutter .....     | 6            | 6        | 1     | ..... | 3       | 10          |
| 3           | Special Physiological Chemistry .....  | Gies, Richards .....   | 12           | 2        | 2     | ..... | 2       | 6           |
| Total ..... |  |                        | .....        | 9        | 4     | 211   | 7       | 231         |

## DEPARTMENT OF PHYSIOLOGY

| No.        | Title of Course            | Instructor              | Hours a Week | Students |      |       |      |         | Grand Total |
|------------|----------------------------|-------------------------|--------------|----------|------|-------|------|---------|-------------|
|            |                            |                         |              | A.B.     | A.M. | Ph.D. | M.D. | Special |             |
| 1          | General Physiology.....    | Lee.....                | 1            | ...      | 5    | 1     | .... | 0       | 6           |
| 2          | Laboratory.....            | Lee, Rudington.....     | 5            | ...      | 5    | 1     | .... | 0       | 6           |
| 3          | The Physiology of Man..... | Curtis, Lee, Green..... | 4            | ...      | 6    | 0     | 429  | 2       | 437         |
| 4          | Special Laboratory.....    | Curtis.....             | 3            | ...      | 0    | 7     | .... | 1       | 8           |
| Total..... |                            |                         | ...          | 6        | 10   | 9     | 429  | 3       | 457         |

## DEPARTMENT OF PRACTICE OF MEDICINE

| No.         | Title of Course  | Instructor                       | Hours a Week | Students |         | Grand Total |
|-------------|--|----------------------------------|--------------|----------|---------|-------------|
|             |  |                                  |              | M.D.     | Special |             |
| 1           | The Practice of Medicine .....                                       | Delafield .....                  | 2            | 298      | 2       | 300         |
| 2           | Clinical Lectures on General Medicine at the Vanderbilt Clinic ..... | Delafield .....                  | 1            | 298      | .....   | 298         |
| 3           | Physical Diagnosis, (30 lessons) .....                               | Draper, Norrie, Sumner .....     | 1            | 151      | .....   | 151         |
| 4           | Hospital Practical Instruction (20 lessons) .....                    | Jackson, James, Lockwood .....   | 1            | 147      | .....   | 147         |
| 5           | Hospital Clinics in General Medicine .....                           | Delafield, Peabody, Draper ..... | 1            | (?)      | .....   | (?)         |
| Total ..... |  |                                  | .....        | 894+     | 2       | 896+        |

## DEPARTMENT OF PSYCHOLOGY AND ANTHROPOLOGY

| No.                       | Title of Course  | Instructor  | Hours a Week | A. B. |    | A. M. |    | Ph. D. | Special |    | Auditor | Total |    | Grand Total |
|---------------------------|--|---|--------------|-------|----|-------|----|--------|---------|----|---------|-------|----|-------------|
|                           |  |   |              | M.    | W. | M.    | W. |        | M.      | W. |         | M.    | W. |             |
| A.—PSYCHOLOGY             |  |   |              |       |    |       |    |        |         |    |         |       |    |             |
| A                         | The Elements of Psychology...                          | Lord  | 3            | 108   |    | 1     |    |        | 15      |    |         | 124   |    | 124         |
| 1                         | Introduction to Psychology...                          | Butler, Cattell, Boas, Starr, Hyslop, Farrand, Thorndike, Strong... | 2            | 14    | 4  | 5     | 3  | 1      | 2       | 2  | 2       | 22    | 11 | 33          |
| 2                         | Experimental Psychology...                             | Cattell   | 2            | 8     |    | 1     |    | 2      |         | 1  |         | 11    | 1  | 12          |
| 3                         | Experimental Psychology (Lab.)                         | Thorndike, Strong...  | 2            | 1     |    | 1     |    | 1      |         | 1  |         | 3     | 1  | 4           |
| 4                         | Problems in Experimental Psychology...                 | Cattell, Davis...   | 2            |       |    |       |    |        |         |    |         |       |    |             |
| 5                         | Research Work in Experimental Psychology...            | Cattell   | 2            |       |    | 2     |    | 5      | 1       |    |         | 8     |    | 8           |
| 6                         | Analytic Psychology...                                 | Cattell, Davis...   | Daily        |       |    | 1     |    | 4      | 1       |    |         | 6     |    | 6           |
| 8                         | Physiological Psychology...                            | C. A. Strong...   | 2            |       |    |       |    | 3      |         |    |         | 3     |    | 3           |
| 11                        | Genetic Psychology...                                  | Farrand...  | 3            | 9     |    | 1     |    |        |         |    |         | 10    |    | 10          |
| 13                        | Research Work in Genetic and Comparative Psychology... | Thorndike...  | 2            |       |    | 4     |    | 3      |         |    |         | 7     |    | 7           |
|                           |  | Thorndike...  |              |       |    |       |    | 2      |         |    |         | 2     |    | 2           |
| Total (Psychology).....   |  |   |              | 140   | 4  | 16    | 3  | 21     | 19      | 4  | 2       | 196   | 13 | 209         |
| B.—ANTHROPOLOGY           |  |   |              |       |    |       |    |        |         |    |         |       |    |             |
| 1                         | General Introductory Course...                         | Boas, Farrand...  | 2            | 3     | 11 | 1     |    | 1      |         |    | 1       | 5     | 12 | 17          |
| 2                         | The Statistical Study of Variation                     | Boas...   | 2            | 1     |    |       |    | 1      |         |    | 1       | 3     |    | 3           |
| 3                         | Ethnology...   | Farrand...  | 2            |       |    | 2     |    | 1      |         |    |         | 3     |    | 3           |
| 4                         | Physical Anthropology...                               | Boas...   | 1            |       |    | 2     |    | 1      |         |    | 1       | 3     | 1  | 4           |
| 5                         | Physical Anthropology...                               | Boas...   | Daily        |       |    | 2     |    |        |         |    |         | 2     |    | 2           |
| 6                         | North American Languages...                            | Boas...   | 2            |       |    | 1     |    |        |         |    |         | 1     |    | 1           |
| Total (Anthropology)..... |  |   |              | 4     | 11 | 8     |    | 4      |         |    | 3       | 17    | 13 | 30          |
| Departmental Total.....   |  |   |              | 144   | 15 | 26    | 3  | 25     | 19      | 4  | 5       | 214   | 27 | 241         |

## DEPARTMENT OF PUBLIC LAW AND JURISPRUDENCE

| No.        | Title of Course  | Instructor        | Hours a Week | Students |       |       |         |             |
|------------|--|-------------------|--------------|----------|-------|-------|---------|-------------|
|            |  |                   |              | A.M.     | Ph.D. | LL.B. | Special | Grand Total |
| 1          | Comparative Constitutional Law.....  | Burgess.....      | 2            | 24       | 7     | 9     | 2       | 42          |
| 2          | Governmental Organization of Territories and other Dependencies of the U. S., 2d half..... | Burgess.....      | 1            | 8        | 6     | ..... | .....   | 14          |
| 5          | Seminar in Constitutional Law of the United States.....                                    | Burgess.....      | 1            | 11       | 2     | 20    | .....   | 33          |
| 6          | History of Diplomacy, 1st half.....  | Moore.....        | 2            | 5        | 9     | 4     | 3       | 21          |
| 7          | History of American Diplomacy, 2d half.....  | Moore.....        | 2            | 6        | 9     | 3     | 1       | 19          |
| 8          | International Law.....   | Moore.....        | 2            | 12       | 10    | 12    | 2       | 36          |
| 10         | Seminar International Law, 1st half.....   | Moore.....        | 2            | 5        | 5     | ..... | .....   | 10          |
| 11         | Criminal Law.....  | Houston.....      | 2            | 26       | ..... | ..... | .....   | 26          |
| 16         | Comparative Administrative Law, 1st half.....  | Goodnow.....      | 3            | 7        | 7     | 6     | .....   | 20          |
| 17         | Municipal Administration, 2d half.....   | Maltbie.....      | 2            | 2        | 2     | ..... | .....   | 4           |
| 18         | Law of Taxation, 1st half.....   | Goodnow.....      | 2            | 2        | ..... | ..... | .....   | 2           |
| 20         | Seminar in Administrative Law, 1st half.....   | Goodnow.....      | 1            | 9        | 4     | ..... | .....   | 13          |
| 21         | Roman Law, 1, 1st half.....  | Munroe Smith..... | 2            | 11       | 2     | 12    | .....   | 25          |
| 22         | Roman Law, 2, 2d half.....   | Munroe Smith..... | 2            | 11       | 2     | 10    | .....   | 23          |
| 23         | History of European Law.....   | Munroe Smith..... | 2            | 6        | 7     | ..... | .....   | 13          |
| 25         | International Private Law.....   | Munroe Smith..... | 1            | 1        | 2     | 4     | 1       | 8           |
| 30         | Institutes of Spanish Private Law, 2d half.....  | Munroe Smith..... | 2            | 1        | 1     | ..... | .....   | 2           |
| Total..... |  |                   |              | 147      | 75    | 80    | 9       | 311         |



[illegible]



## DEPARTMENT OF SEMITIC LANGUAGES

| No.        | Title of Course                                   | Instructor             | Hours a Week | Students |       |       | Grand Total |
|------------|---|------------------------|--------------|----------|-------|-------|-------------|
|            |   |                        |              | A.B.     | A.M.  | Ph.D. |             |
| 1          | Biblical Hebrew.....                              | Gothell.....           | 2            | 3        | ..... | ..... | 3           |
| 2-3        | Biblical Hebrew.....                              | Gothell.....           | 2            | 1        | ..... | 4     | 5           |
| 4-5        | Rabbinical Hebrew.....                            | Gothell.....           | 2            | .....    | 3     | 7     | 10          |
| 7          | Interpretation of the Phœnician Inscriptions..... | Gothell.....           | 1            | .....    | ..... | 1     | 1           |
| 10         | Elementary Course Assyrian.....                   | Gothell.....           | 2            | .....    | ..... | 2     | 2           |
| 14         | Third Course Arabic.....                          | Gothell.....           | 2            | .....    | 1     | 2     | 3           |
| 15         | First Course Syriac.....                          | Gothell, Yohannan..... | 2            | .....    | 1     | 1     | 2           |
| 16         | Second Course Syriac.....                         | Gothell.....           | 2            | .....    | 1     | 3     | 4           |
| 18         | Seminar.....                                      | Gothell.....           | 1            | .....    | 1     | 6     | 7           |
| Total..... |   |                        | .....        | 4        | 7     | 26    | 37          |

## DEPARTMENT OF SURGERY

| No.        | Title of Course  | Instructor  | Hours a Week | Lessons each Student | Students |         |       | Grand Total |
|------------|--|---|--------------|----------------------|----------|---------|-------|-------------|
|            |  |   |              |                      | M.D.     | Special | ..... |             |
| 1          | Surgical Pathology and Regional Surgery.....                                     | Bull, Weir.....   | 1            | .....                | 297      | 1       | ..... | 297         |
| 2          | Clinical Surgery at Vanderbilt Clinic.....                                       | Bull, Weir.....   | 2            | .....                | 298      | .....   | ..... | 298         |
| 3          | Minor Surgery and Bandaging.....   | Foot, Martin.....   | .....        | 16                   | 151      | .....   | ..... | 151         |
| 4          | Minor Operative Surgery.....   | Foot, Martin.....   | .....        | 12                   | 147      | .....   | ..... | 147         |
| 5          | Operative Surgery upon the Cadaver.....  | Hartley, Peck, Bickham, Taylor.....                                 | .....        | 12                   | 147      | .....   | ..... | 147         |
| 6          | Practical Instruction in Surgical Diagnosis and Treatment in Hospital Wards..... | Gallaudet, Hotchkiss, Brewer, Blake.....                            | .....        | .....                | 147      | .....   | ..... | 147         |
| 7          | Surgery of Children.....   | Dowd.....   | .....        | 16                   | 147      | .....   | ..... | 147         |
| 8          | Recitations in Surgery.....  | Eliot.....  | 2 or 3       | 8                    | 147      | .....   | ..... | 147         |
| 9          | Hospital Clinics in General and Regional Surgery.....                            | Bull, Weir, Hartley, Markoe, Abbe, McCosh, Eliot, Poore, Coley..... | .....        | .....                | 298      | .....   | ..... | 298         |
| Total..... |  |   | .....        | .....                | 7        | .....   | ..... | ?           |
| Total..... |  |   | .....        | .....                | 1633+    | 1       | ..... | 1634+       |

## DEPARTMENT OF ZOOLOGY

| No.        | Title of Course                       | Instructor   | Hours a Week | Students |       |       |       |       |       |         |       |       |       |       |             |
|------------|---------------------------------------|--|--------------|----------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------------|
|            |                                       |  |              | A.B.     | A.M.  |       | Ph.D. |       | M.E.  | Special |       | Aud.  | Total |       | Grand Total |
|            |                                       |  |              |          | M.    | W.    | M.    | W.    |       | M.      | W.    |       | M.    | W.    |             |
|            |                                       |  |              |          |       |       |       |       |       |         |       |       |       |       |             |
| 1          | Elementary Zoology, 2d half...        | Calkins.....   | 3½           | 1        | ..... | ..... | ..... | ..... | 37    | 2       | ..... | ..... | 40    | ..... | 40          |
| 2          | Elementary Biology.....               | Wilson, Osborn, Calkins, O. S. Strong, McGregor..... | 4½           | 14       | 1     | ..... | ..... | ..... | ..... | 2       | ..... | ..... | 17    | ..... | 17          |
| 3          | General Zoology.....                  | Calkins, McGregor.....                               | 6            | 2        | 3     | 1     | 1     | 1     | ..... | .....   | ..... | 6     | 2     | ..... | 8           |
| 4          | Comparative Neurology.....            | O. S. Strong.....                                    | 3            | .....    | ..... | 1     | 2     | ..... | ..... | .....   | ..... | 2     | 1     | ..... | 3           |
| 5          | Comparative Zoology.....              | Wilson, Osborn.....                                  | 10           | .....    | ..... | ..... | 1     | 1     | 1     | .....   | ..... | ..... | 1     | 2     | 3           |
| 6          | Comparative Embryology, 1st half..... | Wilson.....  | 6            | .....    | 1     | 1     | ..... | ..... | ..... | .....   | ..... | ..... | 1     | 2     | 3           |
| 7          | Cellular Biology, 1st half.....       | Wilson.....  | 6            | .....    | 2     | 3     | 1     | 1     | ..... | .....   | ..... | 2     | 3     | 6     | 9           |
| 8          | Mammals, Living and Fossil.....       | Osborn.....  | 4            | .....    | 2     | ..... | ..... | ..... | ..... | .....   | ..... | ..... | 2     | 1     | 3           |
| 11         | Advanced Biology, Research.....       | .....  | 12           | .....    | 1     | 1     | 3     | ..... | ..... | .....   | ..... | ..... | 4     | 2     | 6           |
| 13         | The Human Brain and Spinal Cord.....  | O. S. Strong.....                                    | 3            | .....    | 6     | ..... | ..... | ..... | ..... | .....   | ..... | ..... | 6     | ..... | 6           |
| Total..... |                                       |  | .....        | 17       | 16    | 8     | 8     | 5     | 37    | 4       | 1     | 2     | 82    | 16    | 98          |

NOTE—Course 10, The Protozoa, was given as a public lecture course during 1900-1901.





In the departmental statistics appearing on pages 244-295, the enrollment in the various courses of instruction given during the year by the departments has been indicated ; that is, reference is there made to units of instruction. But owing to repetitions caused in many instances by students pursuing more than one course in a department, it is impossible, without further information, to analyze the nature of any departmental clientele. Accordingly, there has been prepared the table that appears on pp. 296-297, wherein is indicated, free from repetition, the proper classification of the students who attended one or more courses of instruction in the respective departments.

Respectfully submitted,

GEORGE B. GERMANN,

*Registrar.*

TREASURER'S STATEMENT OF EDUCATIONAL  
RECEIPTS AND DISBURSEMENTS FOR THE  
YEAR ENDING JUNE 30, 1901

CURRENT RECEIPTS

|                         |             |                   |
|-------------------------|-------------|-------------------|
| Receipts from—          |             |                   |
| Rents.....              |             | \$397,594 26      |
| Fees:                   |             |                   |
| Matriculation Fees..... | \$ 6,170 00 |                   |
| Tuition Fees.....       | 401,679 64  |                   |
| Diploma Fees.....       | 13,250 00   |                   |
| Gymnasium Fees.....     | 10,867 50   |                   |
|                         |             | <u>431,967 14</u> |

MISCELLANEOUS

|   |            |                     |
|---|------------|---------------------|
| From Barnard College for<br>Steam Heat and Power....  | \$3,500 00 |                     |
| From Barnard College for<br>Electric Current Supplied..   | 1,479 33   |                     |
|   |            | <u>4,979 33</u>     |
| From sales of Sextennial Cata-<br>logue .....   | 940 92     |                     |
| From sales of University Cata-<br>logue .....   | 121 91     |                     |
| From sale of History of Col-<br>lege of Physicians and Sur-<br>geons .....  | 2 00       |                     |
| For Duplicate Diplomas,<br>School of Medicine.....  | 3 00       |                     |
|   |            | <u>1,067 83</u>     |
| From Alumni Association of<br>the College of Physicians<br>and Surgeons to reimburse<br>the University for award of<br>Alumni Association Prize<br>made in 1899-1900..... |            |                     |
|   |            | <u>500 00</u>       |
|   |            | <u>6,547 16</u>     |
|   |            | <u>\$836,108 56</u> |

## CURRENT EXPENSES

| General Expenses   | Expenditures<br>in Detail | Total<br>Expenditure | From<br>Income of<br>Corporation | From<br>Income of<br>Trust Funds | From<br>Gifts, etc. |
|--|---------------------------|----------------------|----------------------------------|----------------------------------|---------------------|
| <b>BUSINESS ADMINISTRATION:</b>                            |                           |                      |                                  |                                  |                     |
| Salaries.....  | \$9,312 00                |                      |                                  |                                  |                     |
| Office Rent.....   | 1,100 00                  |                      |                                  |                                  |                     |
| Contingent Expenses.....                                   | 6,891 97                  |                      |                                  |                                  |                     |
| Treasurer's Office, Sundries.....                          | 258 90                    |                      |                                  |                                  |                     |
| Clerk's Office, Sundries.....                              | 999 97                    |                      |                                  |                                  |                     |
| Insurance.....   | 2,588 15                  | \$ 21,150 99         | \$ 21,150 99                     |                                  |                     |
| <b>EDUCATIONAL ADMINISTRATION:</b>                         |                           |                      |                                  |                                  |                     |
| Salaries, University.....                                  | \$37,923 97               |                      |                                  |                                  |                     |
| Salaries, School of Medicine.....                          | 6,250 00                  |                      |                                  |                                  |                     |
| Printing.....  | 44,173 97                 |                      |                                  |                                  |                     |
| Printing and Distributing President's Report.....          | 7,669 20                  |                      |                                  |                                  |                     |
| Advertising.....   | 1,186 20                  |                      |                                  |                                  |                     |
| Guarantee for University Quarterly.....                    | 2,039 73                  |                      |                                  |                                  |                     |
| Sextennial Catalogue.....                                  | 850 00                    |                      |                                  |                                  |                     |
| Lectures.....  | 4,123 82                  |                      |                                  |                                  |                     |
| Commencement.....  | 3,499 39                  |                      |                                  |                                  |                     |
| Baccalaureate.....   | 1,498 71                  |                      |                                  |                                  |                     |
| President's Emergency Fund.....                            | 198 37                    |                      |                                  |                                  |                     |
| Barnard Society.....                                       | 1,496 71                  |                      |                                  |                                  |                     |
| Philolexian Society.....                                   | 200 00                    |                      |                                  |                                  |                     |
| Boat House.....  | 200 00                    |                      |                                  |                                  |                     |
| Bureau of Supplies.....                                    | 1,199 82                  |                      |                                  |                                  |                     |
| Diplomas.....  | 6,403 33                  |                      |                                  |                                  |                     |
| Office Supplies and Sundries, School of Medicine.....      | 750 00                    |                      |                                  |                                  |                     |
| Printing and Postage on Catalogue, School of Medicine..... | 640 75                    |                      |                                  |                                  |                     |
| Alcohol, School of Medicine.....                           | 659 26                    |                      |                                  |                                  |                     |
| Telephone Service.....                                     | 747 61                    |                      |                                  |                                  |                     |
| Paris Exhibition, 1900.....                                | 154 03                    |                      |                                  |                                  |                     |
| Paris Exhibition Gold Medal.....                           | 537 26                    |                      |                                  |                                  |                     |
| Pan-American Exposition, 1901.....                         | 20 54                     |                      |                                  |                                  |                     |
|  | 1,199 75                  | 79,448 45            | 77,498 45                        |                                  | \$1,950 00          |
| Carried forward.....                                       |                           | \$100,599 44         | \$98,649 44                      |                                  | \$1,950 00          |

## TREASURER'S STATEMENT

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|   |             |              |              |             |            |
|---|-------------|--------------|--------------|-------------|------------|
| Brought forward.....  |             | \$100,599 44 | \$ 98,649 44 |             | \$1,950 00 |
| American School for Oriental Study and Research in Palestine..... | \$ 100 00   |              |              |             |            |
| American Mathematical Society (2d annual payment).....            | 100 00      | 200 00       |              |             | 200 00     |
| BUILDINGS AND GROUNDS (116th St.):                                |             |              |              |             |            |
| Water Rates.....  | 2,420 56    |              |              |             |            |
| Gas and Electricity.....  | 2,499 83    |              |              |             |            |
| Fuel.....   | 12,049 82   |              |              |             |            |
| Cleaning.....   | 1,999 88    |              |              |             |            |
| Superintendent's Supplies.....                                    | 3,499 54    |              |              |             |            |
| Repairs.....  | 9,000 00    |              |              |             |            |
| Furniture and Fixtures.....                                       | 2,505 16    |              |              |             |            |
| Uniforms.....   | 478 21      |              |              |             |            |
| Wages: Boiler House and Janitorial Service.....                   | 34,499 56   | 69,012 56    | 69,012 56    |             |            |
| Fire Repairs.....   |             | 351 85       |              |             | 351 85     |
| BUILDINGS AND GROUNDS (59th St.):                                 |             |              |              |             |            |
| Wages: Boiler House and Janitorial Service.....                   | \$14,759 36 |              |              |             |            |
| Assistant to Superintendent of Buildings and Grounds.....         | 1,500 00    |              |              |             |            |
| Repairs.....  | 2,248 65    |              |              |             |            |
| Furniture and Fixtures.....                                       | 499 83      |              |              |             |            |
| Gas and Electricity.....  | 1,998 59    |              |              |             |            |
| Fuel.....   | 6,941 80    |              |              |             |            |
| Cleaning.....   | 1,199 81    |              |              |             |            |
| Superintendent's Supplies.....                                    | 2,449 92    |              |              |             |            |
| Water Rates.....  | 3,026 76    | 35,224 72    | 35,224 72    |             |            |
| GYMNASIUM:  |             |              |              |             |            |
| Salaries.....   | 6,448 32    |              |              |             |            |
| Janitorial Service.....   | 1,799 35    |              |              |             |            |
| Laundry.....  | 1,798 11    |              |              |             |            |
| Supplies and Repairs.....   | 350 00      |              |              |             |            |
| Women's Evening Session.....                                      |             | 525 00       |              |             | 525 00     |
| SLOANE MATERNITY HOSPITAL.....                                    |             | 12,500 00    |              | \$12,500 00 |            |
| Carried forward.....  |             | \$228,809 35 | \$213,282 50 | \$12,500 00 | \$3,026 85 |



## TREASURER'S STATEMENT

|  | Expenditures<br>in Detail | Total<br>Expenditure | From<br>Income of<br>Corporation | From<br>Income of<br>Trust Funds | From<br>Gifts, etc. |
|--|---------------------------|----------------------|----------------------------------|----------------------------------|---------------------|
| Brought forward.....                   |                           | \$228,809 35         | \$213,282 50                     | \$12,500 00                      | \$ 3,026 85         |
| VANDERBILT CLINIC.....                 |                           | 5,650 00             | .....                            | 5,650 00                         |                     |
| JACOBI WARD IN ROOSEVELT HOSPITAL..... |                           | 1,400 00             | .....                            | 1,400 00                         |                     |
| CHAPEL:                                |                           |                      |                                  |                                  |                     |
| Chaplain.....                          | \$ 800 00                 |                      |                                  |                                  |                     |
| Organist.....                          | 1,000 00                  |                      |                                  |                                  |                     |
| Choir.....                             | 213 75                    | 2,013 75             | 2,013 75                         |                                  |                     |
| LIBRARY:                               |                           |                      |                                  |                                  |                     |
| Salaries.....                          | 35,605 97                 |                      |                                  |                                  |                     |
| Books and Binding of.....              | 6,092 51                  |                      |                                  |                                  |                     |
| Incidentals.....                       | 2,000 00                  |                      |                                  |                                  |                     |
| Binding Manuscripts.....               | 14 40                     | 43,712 88            | 43,712 88                        |                                  |                     |
| Avery Architectural Collection.....    | 1,275 90                  |                      |                                  |                                  |                     |
| Barnard Library Fund.....              | 3,326 95                  |                      |                                  |                                  |                     |
| Cotheal Fund.....                      | 320 89                    |                      |                                  |                                  |                     |
| Law-Book Trust Fund.....               | 165 56                    |                      |                                  |                                  |                     |
| Schurz Library Fund.....               | 377 56                    | 5,466 86             | .....                            | 5,466 86                         |                     |
| Drisler Classical Fund.....            |                           | 388 63               | .....                            | 388 63                           |                     |
| John D. Crimmins Collection.....       | 13 18                     |                      |                                  |                                  |                     |
| Jas. Loeb Fund.....                    | 63 03                     |                      |                                  |                                  |                     |
| Wm. G. Low Fund.....                   | 24 81                     |                      |                                  |                                  |                     |
| Special Fund, 1898.....                | 236 85                    |                      |                                  |                                  |                     |
| Special Fund, 1899.....                | 2,307 26                  |                      |                                  |                                  |                     |
| Special Fund, 1900.....                | 10,706 60                 | 13,351 73            | .....                            | .....                            | 13,351 73           |
| EMERITUS OFFICERS.....                 | .....                     | 3,043 75             | 3,043 75                         |                                  |                     |
| Carried forward.....                   |                           | \$303,836 95         | \$262,052 88                     | \$25,405 49                      | \$16,378 58         |

TREASURER'S STATEMENT

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| Brought forward.....  |  |  |             | \$303,836 95 | \$262,052 88 | \$25,405 49 | \$16,378 58 |
|---|--|--|-------------|--------------|--------------|-------------|-------------|
| FELLOWSHIPS, SCHOLARSHIPS, AND PRIZES:                        |  |  |             |              |              |             |             |
| University Fellowships.....                                   |  |  | \$11,850 00 |              |              |             |             |
| University Scholarships.....                                  |  |  | 3,900 00    |              |              |             |             |
| Henry Drisler Fellowship.....                                 |  |  | 500 00      |              |              |             |             |
| Class of '70 Fellowship.....                                  |  |  | 500 00      |              |              |             |             |
| Brooklyn Scholarships.....                                    |  |  | 1,275 00    |              |              |             |             |
| Brooklyn Scholarships at Barnard.....                         |  |  | 1,800 00    |              |              |             |             |
| President's University Scholarships.....                      |  |  | 1,125 00    |              |              |             |             |
| Curtis Graduate Scholarships at Barnard.....                  |  |  | 600 00      |              |              |             |             |
| Benefactors' Scholarships.....                                |  |  | 10,800 00   |              |              |             |             |
| Faculty Scholarships.....                                     |  |  | 3,700 00    |              |              |             |             |
| Beck Scholarship.....   |  |  | 150 00      |              |              |             |             |
| Harper Scholarship.....                                       |  |  | 150 00      |              |              |             |             |
| Hewitt Scholarship.....                                       |  |  | 150 00      |              |              |             |             |
| Moffatt Scholarships.....                                     |  |  | 300 00      |              |              |             |             |
| Schermmerhorn Scholarships.....                               |  |  | 750 00      |              |              |             |             |
| Stuart Scholarships.....                                      |  |  | 225 00      |              |              |             |             |
| Alumni Association Scholarships, College.....                 |  |  | 600 00      |              |              |             |             |
| Alumni Competitive Scholarships, College.....                 |  |  | 450 00      |              |              |             |             |
| Pulitzer Scholarship, Free Tuition in School of Medicine..... |  |  | 200 00      | 39,025 00    | 38,220 00    | 655 00      | 150 00      |
| Barnard Fellowship.....                                       |  |  | 500 00      |              |              |             |             |
| Barnard Medal.....  |  |  | 285 00      |              |              |             |             |
| Beck Prize.....   |  |  | 200 00      |              |              |             |             |
| Bennett Prize.....  |  |  | 40 00       |              |              |             |             |
| Bunner Medal.....   |  |  | 12 62       |              |              |             |             |
| Chanler Historical Prize.....                                 |  |  | 45 00       |              |              |             |             |
| Columbia Fellowship.....                                      |  |  | 1,300 00    |              |              |             |             |
| Proudfit Fellowship in Letters.....                           |  |  | 482 95      |              |              |             |             |
| Pulitzer Trust Scholarships (to Teachers College).....        |  |  | 2,500 00    |              |              |             |             |
| Schiff Fellowship.....  |  |  | 600 00      |              |              |             |             |
| Seidl Fellowship (to Mrs. Seidl).....                         |  |  | 480 00      |              |              |             |             |
| Trowbridge Fellowship (to Mrs. Trowbridge).....               |  |  | 500 00      |              |              |             |             |
| Carried forward.....  |  |  | \$ 6,945 57 | \$342,861 95 | \$300,272 88 | \$26,060 49 | \$16,528 58 |

|  | Expenditures<br>in Detail | Total<br>Expenditure | From<br>Income of<br>Corporation | From<br>Income of<br>Trust Funds | From<br>Gifts, etc. |
|--|---------------------------|----------------------|----------------------------------|----------------------------------|---------------------|
| Brought forward.....   | \$6,945 57                | \$342,861 95         | \$300,272 88                     | \$26,060 49                      | \$16,528 58         |
| FELLOWSHIPS, SCHOLARSHIPS, AND PRIZES— <i>Continued</i>      |                           |                      |                                  |                                  |                     |
| Tyndall Fellowship.....                                      | 648 00                    |                      |                                  |                                  |                     |
| Waring Fund (to Mrs. Waring).....                            | 2,000 00                  |                      |                                  |                                  |                     |
| Waring Fund (to Miss Waring).....                            | 2,000 00                  |                      |                                  |                                  |                     |
| Clark Scholarship, School of Medicine.....                   | 675 00                    |                      |                                  |                                  |                     |
| Harsen Prizes for Clinical Reports, School of Medicine.....  | 225 00                    |                      |                                  |                                  |                     |
| Harsen Prizes for Examination, School of Medicine.....       | 1,000 00                  |                      |                                  |                                  |                     |
| Harsen Prizes, Expenses, School of Medicine.....             | 203 50                    |                      |                                  |                                  |                     |
| J. M. Smith Prize, School of Medicine.....                   | 100 00                    | 13,797 07            | 374 00                           | 13,423 07                        |                     |
| Alumni Association Prize, College.....                       | 50 00                     |                      |                                  |                                  |                     |
| Alumni Fellowships, School of Medicine.....                  | 1,500 00                  |                      |                                  |                                  |                     |
| Annual Fellowship in Greek.....                              | 500 00                    |                      |                                  |                                  |                     |
| Annual Fellowship in Comparative Literature.....             | 650 00                    |                      |                                  |                                  |                     |
| Annual Fellowship, University Settlement Society.....        | 500 00                    |                      |                                  |                                  |                     |
| John D. Jones Scholarship.....                               | 200 00                    |                      |                                  |                                  |                     |
| Society for Promoting Religion and Learning Scholarship..... | 75 00                     |                      |                                  |                                  |                     |
| Special Pulitzer Scholarships.....                           | 6,675 00                  | 10,150 00            |                                  |                                  | 10,150 00           |
|  |                           | \$366,809 02         | \$300,646 88                     | \$39,483 56                      | \$26,678 58         |
| Philosophy, Philology, and Letters.                          |                           |                      |                                  |                                  |                     |
| COMPARATIVE LITERATURE:                                      |                           |                      |                                  |                                  |                     |
| Salaries.....  | 7,000 00                  |                      |                                  |                                  |                     |
| Departmental Appropriation.....                              | 91 16                     | 7,091 16             | 7,091 16                         |                                  |                     |
| ENGLISH:   |                           |                      |                                  |                                  |                     |
| Salaries.....  | 28,350 00                 |                      |                                  |                                  |                     |
| Departmental Appropriation.....                              | 84 32                     | 28,434 32            | 22,584 32                        |                                  | 5,850 00            |
| Carried forward.....   |                           | \$ 35,525 48         | \$ 29,675 48                     |                                  | \$ 5,850 00         |

## TREASURER'S STATEMENT

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|                                     |             |              |              |             |             |
|-------------------------------------|-------------|--------------|--------------|-------------|-------------|
| Brought forward.....                |             | \$35,525 48  | \$20,675 48  | .....       | \$5,850 00  |
| GERMANIC LANGUAGES AND LITERATURES: |             |              |              |             |             |
| Salaries.....                       | \$15,800 00 |              |              |             |             |
| Departmental Appropriation.....     | 49 96       | 15,849 96    | 12,849 96    | \$ 800 00   | 2,200 00    |
| GREEK:                              |             |              |              |             |             |
| Salaries.....                       | 13,000 00   |              |              |             |             |
| Departmental Appropriation.....     | 20 62       | 13,020 62    | 13,020 62    |             |             |
| GREEK AND LATIN AT BARNARD:         |             |              |              |             |             |
| Salaries.....                       | .....       | 6,000 00     | .....        | .....       | 6,000 00    |
| LATIN:                              |             |              |              |             |             |
| Salaries.....                       | 10,500 00   |              |              |             |             |
| Departmental Appropriation.....     | 32 12       | 10,532 12    | 10,532 12    |             |             |
| MUSIC:                              |             |              |              |             |             |
| Salaries.....                       | 7,100 00    |              |              |             |             |
| Departmental Appropriation.....     | 679 74      | 7,779 74     | 3,138 92     | 4,640 82    |             |
| ORIENTAL LANGUAGES:                 |             |              |              |             |             |
| Salaries.....                       | 7,625 00    |              |              |             |             |
| Departmental Appropriation.....     | 7 69        | 7,632 69     | 6,632 69     | .....       | 1,000 00    |
| PHILOSOPHY AND EDUCATION:           |             |              |              |             |             |
| Salaries.....                       | 13,000 00   |              |              |             |             |
| Departmental Appropriation.....     | 250 00      | 13,250 00    | 12,250 00    | .....       | 1,000 00    |
| PSYCHOLOGY AND ANTHROPOLOGY:        |             |              |              |             |             |
| Salaries.....                       | 11,500 00   |              |              |             |             |
| Departmental Appropriation.....     | 500 00      |              |              | { 2,500 00  |             |
| Improvements.....                   | 3,474 12    | 15,474 12    | 6,500 00     | { 500 00    |             |
|                                     |             |              |              | { 3,474 12  | 2,500 00    |
| ROMANCE LANGUAGES AND LITERATURES:  |             |              |              |             |             |
| Salaries.....                       | 17,650 00   |              |              |             |             |
| Departmental Appropriation.....     | 76 51       | 17,726 51    | 14,726 51    | .....       | 3,000 00    |
|                                     |             | \$142,791 24 | \$109,326 30 | \$11,914 94 | \$21,550 00 |

|  | Expenditures<br>in Detail | Total<br>Expenditure | From<br>Income of<br>Corporation | From<br>Income of<br>Trust Funds | From<br>Gifts, etc. |
|--|---------------------------|----------------------|----------------------------------|----------------------------------|---------------------|
| <b>Natural and Exact Sciences</b>                |                           |                      |                                  |                                  |                     |
| <b>ARCHITECTURE:</b>                             |                           |                      |                                  |                                  |                     |
| Salaries.....                                    | \$26,000 00               |                      |                                  |                                  |                     |
| Departmental Appropriation.....                  | 1,199 98                  | \$27,199 98          | \$23,699 98                      |                                  | \$3,500 00          |
| <b>ASTRONOMY:</b>                                |                           |                      |                                  |                                  |                     |
| Salaries.....                                    | 8,600 00                  |                      |                                  |                                  |                     |
| Departmental Appropriation.....                  | 243 73                    |                      |                                  |                                  |                     |
| Observatory for Apparatus.....                   | 195 56                    |                      |                                  |                                  |                     |
| Summer Class in Geodesy.....                     | 800 00                    |                      |                                  |                                  |                     |
| Geodesy, for Instruments.....                    | 127 97                    | 9,967 26             | 9,967 26                         |                                  |                     |
| Lectureship in Celestial Mechanics.....          | 1,000 00                  |                      |                                  |                                  |                     |
| Computations and Measurements.....               | 340 60                    | 1,340 60             |                                  |                                  | 1,340 60            |
| <b>BOTANY:</b>                                   |                           |                      |                                  |                                  |                     |
| Salaries.....                                    | 8,500 00                  |                      |                                  |                                  |                     |
| Departmental Appropriation.....                  | 600 00                    | 9,100 00             | 6,100 00                         |                                  | 3,000 00            |
| <b>CHEMISTRY:</b>                                |                           |                      |                                  |                                  |                     |
| Salaries.....                                    | \$7,500 00                |                      |                                  |                                  |                     |
| Salaries, General Chemistry.....                 | 4,000 00                  |                      |                                  |                                  |                     |
| Salaries, Analytical Chemistry and Assaying..... | 9,100 00                  |                      |                                  |                                  |                     |
| Salaries, Industrial Chemistry.....              | 3,800 00                  |                      |                                  |                                  |                     |
| Salaries, Organic Chemistry.....                 | 2,400 00                  |                      |                                  |                                  |                     |
| Salaries, Laboratory at 59th St.....             | 3,400 00                  |                      |                                  |                                  |                     |
| Salaries, Additional Servants.....               | 1,208 60                  |                      |                                  |                                  |                     |
| Supplies.....                                    | 11,979 41                 | 43,388 01            | 36,904 36                        |                                  | 6,483 65            |
| Salaries at Barnard College.....                 | 2,100 00                  |                      |                                  |                                  |                     |
| Special Equipment Fund, 1900.....                | 248 00                    | 2,348 00             |                                  |                                  | 2,348 00            |
| Carried forward.....                             |                           | \$93,343 85          | \$76,671 60                      |                                  | \$16,672 25         |

TREASURER'S STATEMENT

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|   |            |              |              |  |             |
|---|------------|--------------|--------------|--|-------------|
| Brought forward.....                                |            |              |              |  |             |
| CIVIL ENGINEERING:                                  |            |              |              |  |             |
| Salaries.....                                       | \$9,400 00 |              |              |  |             |
| Departmental Appropriation.....                     | 896 95     |              |              |  |             |
| Assistance in Summer School of Surveying.....       | 600 00     |              |              |  |             |
| Janitor in Summer School of Surveying.....          | 192 25     |              |              |  |             |
| General Expenses at Summer School of Surveying..... | 745 53     |              |              |  |             |
| Instruments for Summer School of Surveying (Re-     |            |              |              |  |             |
| pairs).....   | 299 40     |              |              |  |             |
| Improvements at Farm.....                           | 450 00     |              |              |  |             |
| Rent of Farm.....                                   | 150 00     | 12,734 13    | 12,386 13    |  | 348 00      |
| ELECTRICAL ENGINEERING:                             |            |              |              |  |             |
| Salaries.....                                       | 9,200 00   |              |              |  |             |
| Departmental Appropriation.....                     | 993 60     | 10,193 60    | 10,193 60    |  |             |
| Special Equipment Fund, 1900.....                   |            | 526 60       |              |  | 526 60      |
| MECHANICAL ENGINEERING:                             |            |              |              |  |             |
| Salaries.....                                       | 14,933 34  |              |              |  |             |
| Departmental Appropriation.....                     | 830 84     |              |              |  |             |
| Mechanical Laboratory and Summer School.....        | 1,670 28   |              |              |  |             |
| Drawing.....  | 299 98     |              |              |  |             |
| Use of Teachers College Shops.....                  | 5,000 00   | 22,434 44    | 21,746 44    |  | 688 00      |
| Special Fund for Equipment.....                     | 1,422 85   |              |              |  |             |
| Special Equipment Fund, 1900.....                   | 1,000 00   | 2,422 85     |              |  | 2,422 85    |
| GEOLOGY AND PALÆONTOLOGY:                           |            |              |              |  |             |
| Salaries.....                                       | 8,650 00   |              |              |  |             |
| Departmental Appropriation.....                     | 499 21     | 9,349 21     | 9,349 21     |  |             |
| Summer School in Geology.....                       | 200 00     |              |              |  |             |
| MATHEMATICS:  |            |              |              |  |             |
| Salaries.....                                       | 21,100 00  |              |              |  |             |
| Departmental Appropriation.....                     | 15 13      | 21,115 13    | 16,115 13    |  | 5,000 00    |
| Carried forward.....                                |            | \$172,119 81 | \$146,462 11 |  | \$25,657 70 |
|   |            | \$93,343 85  | \$76,671 60  |  | \$16,672 25 |

|  | Expenditures<br>in Detail | Total<br>Expenditure | From<br>Income of<br>Corporation | From<br>Income of<br>Trust Funds | From<br>Gifts, etc. |
|--|---------------------------|----------------------|----------------------------------|----------------------------------|---------------------|
| Brought forward.....                                       |                           | \$172,119 81         | \$146,462 11                     |                                  | \$25,657 70         |
| MECHANICS:   |                           |                      |                                  |                                  |                     |
| Salaries.....  | \$10,500 00               |                      |                                  |                                  |                     |
| Departmental Appropriation.....                            | 69 41                     |                      |                                  |                                  |                     |
| Apparatus.....   | 117 41                    | 10,686 82            | 10,686 82                        |                                  |                     |
| Special Equipment Fund, 1900.....                          |                           | 386 82               |                                  |                                  | 386 82              |
| METALLURGY:  |                           |                      |                                  |                                  |                     |
| Salaries.....  | 7,100 00                  |                      |                                  |                                  |                     |
| Departmental Appropriation and Summer School.....          | 1,148 83                  | 8,248 83             | 8,248 83                         |                                  |                     |
| Special Equipment Fund, 1900.....                          |                           | 1,235 20             |                                  |                                  | 1,235 20            |
| MINERALOGY:  |                           |                      |                                  |                                  |                     |
| Salaries.....  | 5,600 00                  |                      |                                  |                                  |                     |
| Departmental Appropriation.....                            | 496 22                    | 6,096 22             | 6,096 22                         |                                  |                     |
| MINING:  |                           |                      |                                  |                                  |                     |
| Salaries.....  | 10,599 99                 |                      |                                  |                                  |                     |
| Departmental Appropriation, including Summer<br>Class..... | 1,806 40                  | 12,406 39            | 12,406 39                        |                                  |                     |
| Special Fund.....  | 7,444 98                  |                      |                                  |                                  |                     |
| Special Fund for Equipment of Laboratory.....              | 1,155 21                  |                      |                                  |                                  |                     |
| Special Equipment Fund, 1900.....                          | 802 22                    | 9,402 41             |                                  |                                  | 9,402 41            |
| PHYSICS:   |                           |                      |                                  |                                  |                     |
| Salaries.....  | 21,300 00                 |                      |                                  |                                  |                     |
| Departmental Appropriation.....                            | 500 00                    | 21,800 00            | 20,100 00                        |                                  | 1,700 00            |
| Special Equipment Fund, 1900.....                          |                           | 250 00               |                                  |                                  | 250 00              |
| Carried forward.....                                       |                           | \$242,632 50         | \$204,000 37                     |                                  | \$38,632 13         |

## TREASURER'S STATEMENT

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|  |             |              |              |            |             |
|--|-------------|--------------|--------------|------------|-------------|
| Brought forward.....                               |             | \$242,632 50 | \$204,000 37 |            | \$38,632 13 |
| <b>ZOOLOGY:</b>                                    |             |              |              |            |             |
| Salaries.....                                      | \$15,349 96 |              |              |            |             |
| Departmental Appropriation.....                    | 1,000 00    |              |              |            |             |
| Marine Table, Wood's Holl.....                     | 100 00      | 16,449 96    | 11,346 88    | \$3,003 08 | 2,100 00    |
| Payments from Dyckman Fund.....                    |             | 400 00       |              | 400 00     |             |
| Seniff Zoological Expedition.....                  | 4 18        |              |              |            |             |
| Special Fund for Equipment.....                    | 731 60      |              |              |            |             |
| Special Equipment Fund, 1900.....                  | 9 25        |              |              |            |             |
| Special Fund for 1901.....                         | 450 00      |              |              |            |             |
| Special Fund for Zoological Equipment.....         | 499 81      |              |              |            |             |
| Zoological Station at Naples.....                  | 250 00      | 1,944 84     |              |            | 1,944 84    |
|  |             | \$261,427 30 | \$215,347 25 | \$3,403 08 | \$42,676 97 |
| <b>School of Law</b>                               |             |              |              |            |             |
| Salaries.....                                      | \$36,250 00 |              |              |            |             |
| Departmental Appropriation.....                    | 85 01       | \$36,335 01  | \$36,335 01  |            |             |
|  |             |              |              |            |             |
| <b>School of Political Science</b>                 |             |              |              |            |             |
| Salaries.....                                      | \$62,862 50 |              |              |            |             |
| Departmental Appropriation, Public Law.....        | 50 00       |              |              |            |             |
| Departmental Appropriation, Political Economy..... | 48 77       |              |              |            |             |
| Departmental Appropriation, History.....           | 50 00       | \$63,011 27  | \$51,561 27  |            | \$11,450 00 |
| Historical Reading-Room Equipment.....             |             | 68 85        |              |            | 68 85       |
|  |             | \$63,080 12  | \$51,561 27  |            | \$11,518 85 |
| <b>School of Medicine</b>                          |             |              |              |            |             |
| Salaries.....                                      | \$18,516 25 |              |              |            |             |
| Supplies.....                                      | 3,275 83    | \$21,792 08  | \$20,296 58  |            | \$1,495 50  |
| Carried forward.....                               |             | \$21,792 08  | \$20,296 58  |            | \$1,495 50  |
| <b>ANATOMY:</b>                                    |             |              |              |            |             |



|  | Expenditures<br>in Detail | Total<br>Expenditure | From<br>Income of<br>Corporation | From<br>Income of<br>Trust Funds | From<br>Gifts, etc. |
|--|---------------------------|----------------------|----------------------------------|----------------------------------|---------------------|
| Brought forward.....                     |                           | \$21,972 08          | \$20,296 58                      |                                  | \$1,495 50          |
| PHYSIOLOGICAL CHEMISTRY:                 |                           |                      |                                  |                                  |                     |
| Salaries.....                            | \$6,800 00                |                      |                                  |                                  |                     |
| Supplies (including Special Helper)..... | 2,231 53                  | 9,031 53             | 8,187 57                         |                                  | 843 96              |
| CLINICAL INSTRUCTION:                    |                           |                      |                                  |                                  |                     |
| Salaries.....                            |                           | 14,200 00            | 14,200 00                        |                                  |                     |
| MATERIA MEDICA AND THERAPEUTICS:         |                           |                      |                                  |                                  |                     |
| Salaries.....                            | 7,500 00                  |                      |                                  |                                  |                     |
| Departmental Appropriation.....          | 43 88                     | 7,543 88             | 7,543 88                         |                                  |                     |
| OBSTETRICS AND GYNECOLOGY:               |                           |                      |                                  |                                  |                     |
| Salaries.....                            | 12,200 00                 |                      |                                  |                                  |                     |
| Departmental Appropriation.....          | 100 00                    | 12,300 00            | 12,300 00                        |                                  |                     |
| PATHOLOGY:                               |                           |                      |                                  |                                  |                     |
| Salaries.....                            | 27,585 31                 |                      |                                  |                                  |                     |
| Supplies.....                            | 2,398 15                  |                      |                                  |                                  |                     |
| Apparatus.....                           | 176 50                    | 30,159 96            | 30,132 56                        |                                  | 27 40               |
| PHYSIOLOGY:                              |                           |                      |                                  |                                  |                     |
| Salaries.....                            | 12,700 00                 |                      |                                  |                                  |                     |
| Departmental Appropriation.....          | 877 83                    |                      |                                  |                                  |                     |
| Marine Table, Wood's Holl.....           | 100 00                    | 13,677 83            | 13,604 60                        |                                  | 73 23               |
| PRACTICE OF MEDICINE:                    |                           |                      |                                  |                                  |                     |
| Salaries.....                            |                           | 12,300 00            | 12,300 00                        |                                  |                     |
| SURGERY:                                 |                           |                      |                                  |                                  |                     |
| Salaries.....                            | 12,500 00                 |                      |                                  |                                  |                     |
| Departmental Appropriation.....          | 47 95                     | 12,547 95            | 12,547 95                        |                                  |                     |
|  |                           | \$133,553 23         | \$131,113 14                     |                                  | \$2,440 09          |

## TREASURER'S STATEMENT

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## SUMMARY

|  | From Income<br>of the<br>Corporation | From Income<br>of<br>Trust Funds | From Gifts,<br>Receipts, etc. | Totals                |
|--|--------------------------------------|----------------------------------|-------------------------------|-----------------------|
| General Expenses.....                          | \$300,646 88                         | \$39,483 56                      | \$26,678 58                   | \$366,809 02          |
| Philosophy, Philology, and Letters.....        | 109,326 30                           | 11,914 94                        | 21,550 00                     | 142,791 24            |
| Natural and Exact Sciences.....                | 215,347 25                           | 3,403 08                         | 42,676 97                     | 261,427 30            |
| School of Law.....                             | 36,335 01                            | .....                            | .....                         | 36,335 01             |
| School of Political Science.....               | 51,561 27                            | .....                            | 11,518 85                     | 63,080 12             |
| School of Medicine.....                        | 131,113 14                           | .....                            | 2,440 09                      | 133,553 23            |
| Total Payments from Income of Corporation..... | <u>\$844,329 85</u>                  |                                  |                               |                       |
| Total Payments from Income of Trust Funds..... | .....                                | <u>\$54,801 58</u>               |                               |                       |
| Total Payments from Gifts, Receipts, etc.....  | .....                                | .....                            | <u>\$104,864 49</u>           |                       |
| Total Current Expenses.....                    | .....                                | .....                            | .....                         | <u>\$1,003,995 92</u> |

## ACCOUNT OF INCOME AND OPERATING EXPENSES

## OPERATING EXPENSES

|  |              |
|--|--------------|
| Items Provided out of the General Funds of the Corporation ..... | \$844,329 85 |
|--|--------------|

## INCOME

|  |                   |
|--|-------------------|
| Income of the Corporation (exclusive of Income of Trust Funds) ..... | 836,108 59        |
| Deficit for the year ending June 30, 1901 .....                      | <u>\$8,221 29</u> |

## INCOME OF TRUST FUNDS HELD FOR SPECIAL PURPOSES

## FOR CURRENT EXPENSES:

|                                     |                    |
|-------------------------------------|--------------------|
| Beck Scholarship Fund .....         | \$ 100 00          |
| Center Fund in Music .....          | 4,640 82           |
| DaCosta Fund in Zoölogy .....       | 3,003 08           |
| Dyckman Fund in Zoölogy .....       | 400 00             |
| Gebhard Fund in German .....        | 800 00             |
| Moffatt Scholarship Fund .....      | 90 00              |
| Schermerhorn Scholarship Fund ..... | 225 00             |
| Stuart Scholarship Fund .....       | 240 00             |
| Trust Fund for Psychology .....     | 4,140 00           |
|                                     | <u>\$13,638 90</u> |

## FOR PURCHASE OF BOOKS:

|                              |                 |
|------------------------------|-----------------|
| Avery Fund .....             | 1,275 00        |
| Barnard Library Fund .....   | 2,356 95        |
| Margaret Barnard Fund .....  | 489 26          |
| Cotheal Fund .....           | 270 00          |
| Drisler Classical Fund ..... | 400 00          |
| Law-Book Trust Fund .....    | 170 00          |
| Schurz Library Fund .....    | 400 00          |
|                              | <u>5,361 21</u> |

## FOR FELLOWSHIPS, SCHOLARSHIPS, AND PRIZES:

|                                 |                    |
|---------------------------------|--------------------|
| Barnard Fellowship Fund .....   | 400 00             |
| Beck Prize Fund .....           | 400 00             |
| Bennett Prize Fund .....        | 40 00              |
| Bunner Fund .....               | 40 00              |
| Campbell Scholarship Fund ..... | 88 67              |
| Chanler Prize Fund .....        | 45 00              |
|                                 | <u>1,013 67</u>    |
| Carried forward .....           | <u>\$20,013 78</u> |

## TREASURER'S STATEMENT

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|  |           |                          |
|--|-----------|--------------------------|
| Brought forward.....                                 |           | \$20,013 78              |
| Columbia Fellowship Fund.....                        | \$585 00  |                          |
| Curtis Scholarship Fund.....                         | 400 00    |                          |
| Illig Fund.....                                      | 130 00    |                          |
| Loubat Fund.....                                     | 350 00    |                          |
| Loubat Prize Fund.....                               | 35 47     |                          |
| McKim Fellowship Fund.....                           | 900 00    |                          |
| Member of Class of '85 Fund.....                     | 42 00     |                          |
| Mosenthal Fellowship Fund.....                       | 300 00    |                          |
| Perkins Fellowship Fund.....                         | 228 00    |                          |
| Proudfit Fellowship Fund in Letters....              | 537 80    |                          |
| Pulitzer Scholarship Fund.....                       | 2,410 00  |                          |
| Schiff Fellowship Fund.....                          | 600 00    |                          |
| Schurz Fellowship Fund.....                          | 400 00    |                          |
| Tyndall Fellowship Fund.....                         | 440 00    |                          |
| Clark Scholarship Fund, School of Medi-<br>cine..... | 675 00    |                          |
| Harsen Prize Fund, School of Medicine..              | 1,189 28  |                          |
| Proudfit Fellowship Fund in Medicine...              | 537 80    |                          |
| Smith Prize Fund, School of Medicine...              | 110 00    |                          |
| Stevens Prize Fund, School of Medicine..             | 90 00     |                          |
|  |           | <hr/> 9,960 35           |
| FOR MISCELLANEOUS PURPOSES:                          |           |                          |
| Eaton Professorship Fund.....                        | 21 32     |                          |
| German Lecture Fund.....                             | 10 67     |                          |
| Jacobi Ward Fund (to Roosevelt Hos-<br>pital).....   | 1,475 00  |                          |
| Seidl Fund.....                                      | 480 00    |                          |
| Trowbridge Fund.....                                 | 500 00    |                          |
| Waring Fund.....                                     | 2,000 00  |                          |
| Waring Fund.....                                     | 2,000 00  |                          |
| Sloane Maternity Hospital Fund.....                  | 12,500 00 |                          |
| Vanderbilt Clinic Endowment Fund....                 | 5,650 00  |                          |
|  |           | <hr/> 24,636 99          |
|  |           | <hr/> <u>\$54,611 12</u> |

# RECEIPTS FROM BARNARD COLLEGE AND OTHER SOURCES FOR DESIGNATED PURPOSES

From Barnard College towards salaries in  
the following Departments:

|   |            |             |
|---|------------|-------------|
| English .....   | \$5,850 00 |             |
| Germanic Languages and Literatures...   | 2,200 00   |             |
| Greek and Latin at Barnard.....   | 6,000 00   |             |
| Philosophy and Education.....   | 1,000 00   |             |
| Romance Languages and Literatures....   | 3,000 00   |             |
| Botany .....  | 3,000 00   |             |
| Chemistry at Barnard.....   | 2,100 00   |             |
| Mathematics .....   | 5,000 00   |             |
| Physics .....   | 1,700 00   |             |
| Zoölogy .....   | 2,100 00   |             |
| School of Political Science.....  | 11,150 00  |             |
|   |            | \$43,100 00 |
| Educational Administration. Salaries.<br>(Gift.) .....  | 1,200 00   |             |
| Educational Administration. Lectures.<br>(Gifts.) .....   | 750 00     |             |
|   |            | 1,950 00    |
| Buildings and Grounds: Fire Repairs. Re-<br>ceived from Insurance Company in settle-<br>ment of loss by fire of Dec. 21, 1900, in<br>College Hall. .... |            | 352 00      |
| Gymnasium: Women's Evening Session:   |            |             |
| Fees .....  | 184 00     |             |
| Gifts .....   | 357 00     |             |
|   |            | 541 00      |
| Library:  |            |             |
| James Loeb Fund. (Gift.).....   | 75 00      |             |
| William G. Low Fund. (Gift.).....   | 200 00     |             |
| Special Fund, 1900. (Gifts.).....   | 15,000 00  |             |
|   |            | 15,275 00   |
| Fellowships, Scholarships, and Prizes:  |            |             |
| University Fellowships. (Gift.).....  | 150 00     |             |
| Alumni Association Prize, College. (Gift.)  | 50 00      |             |
| Alumni Fellowships, School of Medicine.<br>(Gift.) .....  | 1,500 00   |             |
| Annual Fellowship in Greek. (Gift.)...  | 500 00     |             |
| Annual Fellowship—University Settle-<br>ment Society. (Gift.).....  | 500 00     |             |
| John D. Jones Scholarship. (Gift.).....   | 200 00     |             |
| Society for Promoting Religion and<br>Learning Scholarship. (Gift.).....  | 75 00      |             |
| Special Pulitzer Scholarships. (Gift.)...   | 6,675 00   |             |
|   |            | 9,650 00    |
| Carried forward.....  |            | \$70,868 00 |

## TREASURER'S STATEMENT

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|   |          |             |
|---|----------|-------------|
| Brought forward.....  |          | \$70,868 00 |
| Oriental Languages, Salaries. (Gift.)....   |          | 1,000 00    |
| Psychology and Anthropology, Salaries.<br>(Gift.).....  |          | 2,500 00    |
| Architecture, Salaries. (Gift.).....  |          | 3,500 00    |
| Astronomy: for Computations and Meas-<br>urements. By transfer from Fund for<br>Lectureship in Celestial Mechanics.....                     | \$400 00 |             |
| Astronomy: for Publication of Work on<br>the Variation of Latitude. By transfer<br>from Fund for Lectureship in Celestial<br>Mechanics..... | 1,600 00 | 2,000 00    |
| Chemistry: Supplies. (Breakage and Sup-<br>plies.).....   | 6,483 65 |             |
| Chemistry: Special Equipment Fund, 1900.<br>By transfer from Special Equipment<br>Fund, 1900.....   | 250 00   | 6,733 65    |
| Civil Engineering: Departmental Appro-<br>priation. Road Tests.....   |          | 348 00      |
| Mechanical Engineering: Mechanical Lab-<br>oratory and Summer School:<br>Sale of Material.....  | \$643 00 |             |
| Sale of Gas Engines.....  | 30 00    |             |
|   | 673 00   |             |
| Mechanical Engineering: Special Fund for<br>Equipment. (Gift.).....   | 700 00   |             |
| Mechanical Engineering: Departmental<br>Appropriation. (Sale of Gas Engine.)..  | 15 00    | 1,388 00    |
| Mining: Special Fund. By transfer from<br>Special Fund for Departments of Mining<br>and Metallurgy.....                                     |          | 8,500 00    |
| Physics: Special Equipment Fund, 1900.<br>By transfer from Special Equipment<br>Fund, 1900.....   |          | 250 00      |
| Zoölogy: Special Fund, 1901. (Gift.)....  | 1,000 00 |             |
| Zoölogy: Special Fund for Zoölogical Equip-<br>ment. (Gift.).....   | 500 00   |             |
| Zoölogy: Zoölogical Station at Naples.<br>(Gift.).....  | 250 00   | 1,750 00    |
| School of Political Science: Salaries. From<br><i>Political Science Quarterly</i> .....   | 200 00   |             |
| From "Columbia University Press"....  | 100 00   | 300 00      |
| Carried forward.....  |          | \$99,137 65 |

|   |                     |
|---|---------------------|
| Brought forward.....  | \$99,137 65         |
| School of Political Science. Historical<br>Reading-Room Equipment Fund. (Gift.)   | 5,000 00            |
| Anatomy: Supplies. (Sale of Material.)..  | 1,495 50            |
| Physiological Chemistry: Supplies. (Sale<br>of Supplies.).....                    | 843 96              |
| Pathology: Supplies. (Sale of Material.).   | 27 40               |
| Physiology: Departmental Appropriation.<br>(Sale of Supplies.).....               | 73 23               |
| American School for Oriental Study and<br>Research in Palestine Fund. (Gift.).... | 250 00              |
|   | <u>\$106,827 74</u> |

## RECEIPTS FOR PERMANENT PURPOSES

|  |                     |
|--|---------------------|
| Campbell Scholarship Fund.....                     | \$ 6,000 00         |
| Gift of Misses Maria L. and Catherine B. Campbell. |                     |
| German Lecture Fund.....                           | 1,000 00            |
| Gift of Oswald Ottendorfer.                        |                     |
| Eaton Professorship Fund.....                      | 3,055 79            |
| On account of legacy.                              |                     |
| Dean Lung Professorship Fund.....                  | 100,000 00          |
| Gift from an anonymous friend.                     |                     |
| Alexander Moncrief Proudfit Fellowship Fund.....   | 1,475 00            |
| Maria McLean Proudfit Fellowship Fund.....         | 1,475 00            |
| Balance of legacies.                               |                     |
| Students Loan Fund.....                            | 300 00              |
| Gift from President Low.                           |                     |
|  | <u>\$113,305 79</u> |

## PRINCIPAL OF TRUST FUNDS

|                              | Uninvested | Invested     | Principal    |
|------------------------------|------------|--------------|--------------|
| Avery Architectural Fund.... | \$         | 30,000 00    | \$ 30,000 00 |
| Barnard Fellowship Fund..... |            | 10,000 00    | 10,000 00    |
| Barnard Library Fund.....    |            | 59,501 64    | 59,501 64    |
| Margaret Barnard Fund.....   |            | 16,231 67    | 16,231 67    |
| Beck Prize Fund.....         |            | 8,000 00     | 8,000 00     |
| Beck Scholarship Fund.....   |            | 2,000 00     | 2,000 00     |
| Bennett Prize Fund.....      |            | 1,000 00     | 1,000 00     |
| Bunner Prize Fund.....       |            | 1,000 00     | 1,000 00     |
| Campbell Scholarship Fund... |            | 6,000 00     | 6,000 00     |
| Center Fund.....             |            | 123,524 50   | 123,524 50   |
| Chanler Prize Fund.....      |            | 1,000 00     | 1,000 00     |
| Columbia Fellowship Fund.... |            | 13,000 00    | 13,000 00    |
| Cotheal Fund.....            |            | 6,000 00     | 6,000 00     |
| Curtis Fund.....             |            | 10,000 00    | 10,000 00    |
| DaCosta Professorship Fund.. |            | 86,576 83    | 86,576 83    |
| Carried forward.....         |            | \$373,834 64 | \$373,834 64 |

**TREASURER'S STATEMENT**

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|   | Uninvested      | Invested              | Principal             |
|---|-----------------|-----------------------|-----------------------|
| Brought forward.....                              |                 | \$373,834 64          | \$373,834 64          |
| Dean Lung Professorship Fund                      |                 | 100,000 00            | 100,000 00            |
| Drisler Classical Fund.....                       |                 | 10,000 00             | 10,000 00             |
| Dyckman Fund.....                                 |                 | 10,000 00             | 10,000 00             |
| Eaton Professorship Fund....                      |                 | 3,055 79              | 3,055 79              |
| Gebhard Fund.....                                 |                 | 20,000 00             | 20,000 00             |
| German Lecture Fund.....                          |                 | 1,000 00              | 1,000 00              |
| Illig Fund.....                                   |                 | 2,000 00              | 2,000 00              |
| Law-Book Trust Fund.....                          |                 | 4,250 00              | 4,250 00              |
| Loubat Fund.....                                  |                 | 7,000 00              | 7,000 00              |
| Loubat Prize Fund.....                            | \$350 00        | 1,335 54              | 1,685 54              |
| McKim Fellowship Fund.....                        |                 | 20,000 00             | 20,000 00             |
| Member of Class of '85 Fund..                     |                 | 1,050 00              | 1,050 00              |
| Moffatt Scholarship Fund.....                     |                 | 2,000 00              | 2,000 00              |
| Mosenthal Fellowship Fund...                      |                 | 7,500 00              | 7,500 00              |
| Perkins Fellowship Fund.....                      |                 | 5,700 00              | 5,700 00              |
| Proudfit (Alexander M.) Fel-<br>lowship Fund..... |                 | 13,875 00             | 13,875 00             |
| Pulitzer Fund.....                                |                 | 50,448 75             | 50,448 75             |
| Schermerhorn Scholarship<br>Fund.....             |                 | 5,000 00              | 5,000 00              |
| Schiff Fellowship Fund.....                       |                 | 15,000 00             | 15,000 00             |
| Schurz Fellowship Fund.....                       |                 | 10,000 00             | 10,000 00             |
| Schurz Library Fund.....                          |                 | 10,000 00             | 10,000 00             |
| Seidl Fund.....                                   |                 | 12,000 00             | 12,000 00             |
| Stuart Scholarship Fund.....                      |                 | 6,000 00              | 6,000 00              |
| Trowbridge Fellowship Fund..                      |                 | 10,000 00             | 10,000 00             |
| Trust Fund for Psychology...                      |                 | 100,000 00            | 100,000 00            |
| Tyndall Fellowship Fund.....                      |                 | 10,945 50             | 10,945 50             |
| Waring Municipal Fund (for<br>Mrs. Waring).....   |                 | 50,000 00             | 50,000 00             |
| Waring Municipal Fund (for<br>Miss Waring).....   |                 | 50,000 00             | 50,000 00             |
|   | <u>\$350 00</u> | <u>\$911,995 22</u>   | <u>\$912,345 22</u>   |
| <b>SCHOOL OF MEDICINE</b>                         |                 |                       |                       |
| Clark Scholarship Fund.....                       |                 | \$ 14,000 00          | \$ 14,000 00          |
| Harsen Prize Fund.....                            |                 | 31,114 10             | 31,114 10             |
| Jacobi Ward Fund.....                             |                 | 50,000 00             | 50,000 00             |
| Proudfit (Maria M.) Fellowship<br>Fund.....       |                 | 13,875 00             | 13,875 00             |
| Smith Prize Fund.....                             |                 | 2,337 81              | 2,337 81              |
| Stevens Prize Fund.....                           |                 | 1,899 88              | 1,899 88              |
| Sloane Maternity Hospital<br>Fund.....            |                 | 250,000 00            | 250,000 00            |
| Vanderbilt Clinic Endowment<br>Fund.....          |                 | 115,000 00            | 115,000 00            |
|   |                 | <u>\$478,226 79</u>   | <u>\$478,226 79</u>   |
|   | <u>\$350 00</u> | <u>\$1,390,222 01</u> | <u>\$1,390,572 01</u> |

JOHN McL. NASH,  
*Treasurer.*



MISCELLANEOUS GIFTS RECEIVED DURING  
ACADEMIC YEAR 1900-1901

(Gifts in money mentioned in the Treasurer's Statement, and gifts to the Library stated in the Librarian's Report are omitted.)

GENERAL

William I. Walter, Seth Sprague Terry, Miss Terry, Gustavus T. Kirby, Frank W. Savin, and the American Art Association,  
Ornamental Japanese cabinet.

Seth Sprague Terry,  
Valuable collection of photographs made by his uncle, Mr. Joseph W. Sprague.

The surviving children of Prof. John S. Newberry,  
Portrait Relief in bronze of the late Dr. John Strong Newberry, formerly Professor of Geology in Columbia University.

J. Ackerman Coles, M.D.,  
Reproduction of the Sword of Agamemnon, found by Dr. Schliemann at Mycenæ and now in the Museum at Athens.

Paul System Company, of New York,  
Donation of use of the Paul system of circulating steam, attaching same to the heating plant of Fayerweather Hall.

The Students of the University,  
Bust of the late Prof. Egleston.

Fayerweather & Ladew,  
Belting needed by the University in its different Departments.

DEPARTMENT OF ASTRONOMY

E. A. Matthiessen,  
\$50 to enable representative of Department to accompany the Government Eclipse Expedition to Sumatra.

Andrew Carnegie,  
\$100 to enable representative of Department to accompany Government Eclipse Expedition to Sumatra.

## DEPARTMENT OF CHEMISTRY

- A Friend,  
Twenty-five pounds of crude limonene for use of Organic Laboratory.
- Joseph Dixon Crucible Company, Jersey City, through F. S. Hyde, Ph.B., Columbia, 1893,  
One gallon Dixon silica graphite paint for use of Organic Laboratory.
- Phelps, Dodge & Co., through James Douglas,  
Tin ores for use of laboratory.
- W. R. Appleby, University of Minnesota,  
Iron ores for use of students in laboratory.
- G. C. Stone, Ph.B., Columbia, 1879, of the N. J. Zinc Company,  
Limestones and Spiegel Eisens, for use in the laboratories.
- Ricketts & Banks, New York City,  
Uranium ores.
- Ledoux & Company,  
Ores, mattes, etc.
- Sidney Mason, of the Welsbach Company,  
Collection of specimens illustrating the manufacture of cloisonné vases.
- The Ampere Company, Niagara Falls,  
Specimens of synthetic camphor, barium silicide, barium hydroxide.
- A. J. Lindeman, Hoverson, & Co., Milwaukee, Wis.,  
New century lamp.
- Dr. Richard Pierce, Denver, Col.,  
Specimen of the new mineral carnotite.
- W. S. Scandlin, New York City,  
Wax paper negative.
- Clifford Richardson,  
Specimens of crude petroleum from Beaumont, Texas.
- Dr. N. S. Keith.  
Specimens of copper sulphide, copper carbonate, electrolytic copper, from Arlington, N. J.
- Steranes & Gordon,  
Civet horn.

- Dr. Meyers.  
Collection of ten photographs illustrating the phosphor printing process.
- Blakely B. Nation,  
Specimen of crystallized barium chloride.
- George Neustadt of Eimer & Amend, New York City,  
Specimens of artificial ruby made in the electrolytic furnace, from Essen, Germany. Pure chromium made in the electrolytic furnace at Holcomb Rock, Va., Wilson Aluminium Co. Specimens of titanium carbide.
- Charles M. Hall, Niagara Falls,  
Collection of specimens of fused alumina.
- Edward G. Acheson, Niagara Falls,  
Specimens of artificial graphite and carborundum.
- S. Spiegelberg,  
Sea fan from Key West.
- Roessler & Hasslacher Chemical Co., New York City,  
Jar of cyanide of potassium made at Niagara Falls by the Castner process.
- R. L. Shainwald, Jr., New York City,  
Modern Italian lamp.
- Standard Paint Company,  
Ruberoid paint.
- Kern Gas Light Company, New York City,  
Kern incandescent burner.
- Dr. Waldron Shapleigh, of the Welsbach Co.,  
Monozite purified by the magnetic separator.
- G. L. Schiesser & Co., New York City,  
Three bottles unfermented grape juice from Switzerland
- George F. Kunz,  
Collection of specimens illustrating Dechert system glass manufacture from Germany.
- Peter S. Gilchrist,  
Mammoth alum crystal.
- Sperm Oil Lamp, Wethersfield, Conn.,

## LAW LIBRARY

- Miss Ida H. Ogilvie,  
Certain law books belonging to the library of her late father.

DEPARTMENT OF MECHANICAL ENGINEERING

- Joseph T. Ryerson & Son, Chicago, Ill.,  
 Gift of machinery.
- E. P. Allis Co., Milwaukee, Wis.,  
 Bronze bust of the late Mr. Edward P. Allis.
- Rear-Admiral George W. Melville,  
 Gift in connection with the covering of the steam pipes  
 of the Department with non-conducting material.
- John Fritz,  
 \$250 towards the equipment of the laboratory.
- C. W. Hunt,  
 \$250 towards the equipment of the laboratory.
- William Fellowes Morgan,  
 \$100 towards the equipment of the laboratory.
- Fairbanks Company,  
 Eight platform scales of various sizes.

DEPARTMENT OF METALLURGY

- Miss Matilda C. McVickar,  
 Photograph of the late Dr. Egleston, and his degree of the  
 Legion of Honor, with the decoration belonging thereto.
- Through Prof. Howe,  
 Drawings belonging to "a graduate metallurgist."

DEPARTMENT OF MINERALOGY

- John C. F. Randolph,  
 Number of exceedingly fine specimens of silver minerals.
- George W. Egleston,  
 Tablet in memory of the late Prof. Thomas Egleston, to  
 be placed in the Egleston Mineralogical Museum.

DEPARTMENT OF SEMITIC LANGUAGES

- Temple Emanu-El,  
 \$500 towards expenses of the Department.

DEPARTMENT OF ZOÖLOGY

- Through Mrs. Henry F. Osborn,  
 \$1500 to fit up the zoölogical laboratories of Barnard  
 College.













